Volume 167 No. 4

Oil, Paint and Drug Reporter

The Chemical Market Authority Since 1871

January 24 1955

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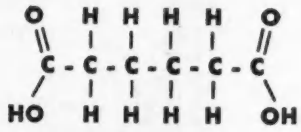

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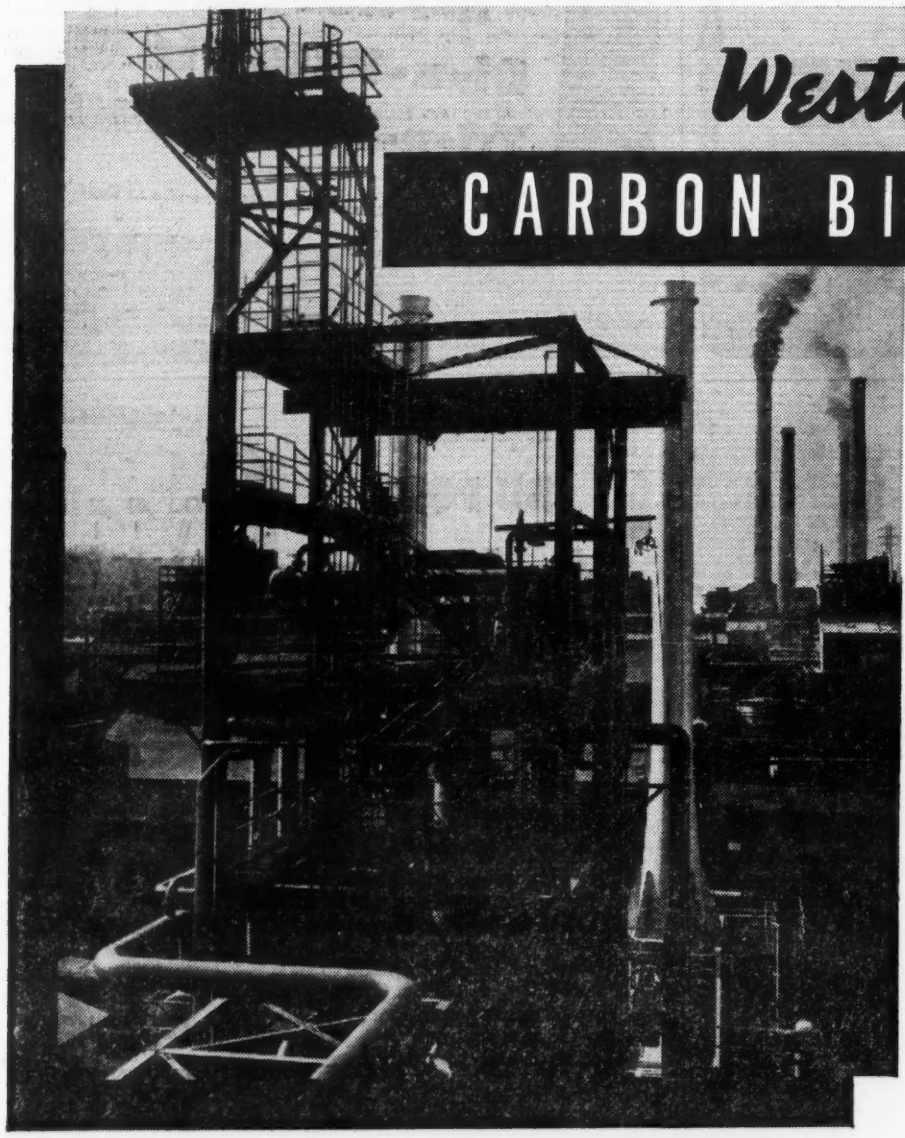

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Oil, Paint and Drug Reporter

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President Asks Modest Rise in Funds for FDA

President Eisenhowever recommended to congress last week that the budget for the Food and Drug Administration be increased moderately to $5,484,000 for the new fiscal year, beginning July 1, while a citizens' group conducts a survey of food and drug law enforcement in relation to its needs and effectiveness in protecting the consumers.

The current year's appropriation amounts to $5,100,000 and is $100,000 less than was available in the preceding fiscal year. This was the second year in succession that the FDA's funds had been reduced below the previous year and led to the appointment of the citizen's group to survey the agency's needs.

In an announcement by Secretary Oveta Culp Hobby of the Department of Health, Education and Welfare, it was stated that the committee is to evaluate the adequacy of enforcement and "make recommendations as to the amount and kind of enforcement of the federal food, drug and cosmetic act, and related statutes, which will best serve the interests of the country.

Funds Granted by Congress

Funds for the study, amounting to $21,000, were set aside from a special appropriation made by the latest congress shortly before its adjournment.

The increased funds provided in the new budget for the agency will largely go towards enforcement work. According to the budget, $5,214,500 is to be allotted for general enforcement operations as compared with $4,813,500 in the current year. In this connection, the FDA plans to step up its enforcement all along the line. Inspection of factories, warehouses, etc., is to be increased to 11,700 establishments from the current schedule of 10,300; inspection of import lots is to be increased from 23,150 to 26,000; samples collected for examination will be increased from 31,430 to 36,500 and laboratory analyses and other examinations will be increased from 42,125 to 47,800.

Certification services of the agency, which includes certification of antibiotics, insulin and coaltar colors, will amount to

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Anderson in Atomic Post

Sen. Clinton P. Anderson of New Mexico last week was selected as the new chairman of the joint congressional committee on atomic energy, succeeding Rep. W. Sterling Cole of New York, who served during the Republican controlled congress of the last two years. Sen. Anderson announced that two subcommittees would be formed this year in addition to the regular six subcommittees that have served in the past.

Naval Stores Loan Program Announced for 1955 Crop

A loan program continuing price support for gum naval stores of the 1955 crop has been announced by the Department of Agriculture. The 1955 support level, applied to the naval stores production unit of 50 gallons of turpentine and 1,400 pounds of rosin, is $129.02, and is based on 90 percent of the parity price of crude pine gum, unprocessed basis, as of December 15.

The per-unit support level will remain fixed throughout the loan period (calendar year 1955). Individual loan rates applied to turpentine and rosin of grade I or better, however, may be revised from time to time as conditions justify, though always maintaining the per-unit support level. The initial loan rates will be 50 cents per gallon of turpentine, bulk, and $7.43 per 100 pounds of gum rosin. The rosin rate will be applicable to the average rosin grade, WG, with rates 10 cents higher for grades X and WW and 10 cents lower for grades N. M. K, and I.

Commodity Credit Corportaion loans will be available during 1955, on eligible gum naval stores produced domestically in the calendar year 1955 through the American Turpentine Farmers Association Cooperative of Valdosta, Ga. Loans will be available to producer-members who cooperate in the 1955 gum naval stores conservation program or otherwise follow good conservation practices.

To be eligible for loans, gum rosin must be federally inspected and packed in eligible metal drums placed on approved storage yards, while turpentine must meet

—Continued on page 62

Dry Milk Sale Is Begun By CCC for Feed Usage

Government stocks of non-fat dry milk, of the roller process type, are being offered for sale as poultry and live stock feeds at 11½ and 12½ cents per pound, delivered, by the Commodity Credit Corporation, it was announced last week. The price depends on the delivery area. Approximately 10,000,000 pounds are expected to be sold under the program.

The 11½ cents per pound price will prevail on deliveries in North and South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Ohio and Michigan. In all other states the delivered price of 12½ cents per pound will prevail. Sales will be made by the Cincinnati, Ohio, office of the CCC. Roller process dry milk is now being supported by the government at 14½ cents per pound and is being sold for other than poultry and live stock feed uses at 15¼ cents per pound.

Saline Water Conversion Legislation Introduced for Continuing Research

Legislative moves to assure the continuity of the government's research program on saline water conversion were started in the house last week with the introduction of several bills to broaden and extend the current investigations beyond the five years fixed in the 1952 enabling legislation.

Sponsors of the extension bills (H.R. 2104 and 2126) were Representatives Clair Engle of California and Frank T. Bow of Ohio. The bills have been referred to the house committee on interior and insular affairs with good prospects that they will be reported favorably for passage.

'Considerable Progress' Reported

According to the latest report of the Interior department on its saline water research work, considerable progress has been made towards the goal of converting sea water and brackish water into fresh water serviceable to industries and municipalities. Before the program started the cost of converting sea water to fresh water by the best processes in use was about $400 to $500 an acre-foot. The goal is to reduce this cost to about $125 per acre foot or 38 cents per 1,000 gallons.

The report indicated that of thirty-nine research proposals evaluated and several dozen additional suggestions considered, two processes give promise of converting sea water at less than half present costs, and one for brackish water has reached pilot plant stage and is being field tested. Development of unconventional energy sources for demineralization, such as low-cost solar energy, is being explored.

Other Bills Interesting Industry

Several other bills of interest to the chemical and allied industries have been introduced in congress recently, including the following:—

Small Business—Three bills, S. 381, 382 and 383, by Sen. John Sparkman of Alabama to make capital and credit more readily available to small business.

Strategic materials — S. 400 by Sen. George Malone of Nevada to encourage and assist the production of strategic and critical metals, minerals, and materials in the United States.

Health—S. 434 by Sen. Irving Ives of New York to facilitate the broader distribution of health services, and to increase the quantity and quality of health services.

Narcotics—S. J. Res. 19 by Sen. Frederick G. Payne of Maine to provide for a more effective control of narcotic drugs.

Raw materials—H. R. 2123 by Rep. Carl T. Durham of North Carolina to repeal public law 820 of the 80th Congress pro-

—Continued on page 71

MCA Endorses Selective Methods In Fixing Chemical Tariff Rates

The government was urged last week by the Manufacturing Chemists Association to move with caution in changing the tariff rates on chemical products and to consider the matter on a product-by-product basis rather than attempt any across-the-board reductions.

Fred J. Emmerich, chairman of the board of the association, pointed out that the greatest material asset of the free world is the enormous industrial and agricultural strength of the United States. The government, therefore, must be careful not to weaken the industry or destroy its incentive to expand, he declared.

The association's statement of warning was issued as the administration opened its drive for passage of the President's trade agreements extension bill H. R. 1, to extend the law for three more years with new authority to reduce tariffs an additional 15 percent. In testimony before the ways and means committee of the house, members of the cabinet extolled the benefits of the program in promoting the security and welfare of the United States.

Bill to Cushion Economy

Secretary of State John Foster Dulles noted that the bill is drafted so as to cushion our economy against undue shock by reason of competitive imports. Not only would tariff reductions have to be gradual, he said, but the bill does not change the "peril point" and "escape" procedures, designed to protect the economy from especial dangers.

His views were echoed by Secretary of Agriculture Ezra Taft Benson, Secretary of Defense Charles E. Wilson, Secretary of the Treasury George M. Humphrey, Secretary of Labor James P. Mitchell and Foreign Operations Administrator Harold Stassen. The committee is taking testimony from proponents of the trade law extension bill first and will hear the opponents beginning January 26.

MCA's tariff statement was made in advance of the association's appearance before the committee to discuss the pending bill. The association has notified the committee of its desire to testify, but the date has not been fixed as yet. The Synthetic Organic Chemical Manufacturers Association has also asked for permission to appear.

Mr. Emmerich stated that with every important industrial country in the world employing devices of one kind or another to protect its native industries, MCA believes it would be inadvisable for the United States to adopt tariff policies that would weaken a vital domestic industry or destroy incentive to build new plants. In addition, Mr. Emmerich pointed out, such action would "discourage research and development work, result in a decay of technics of production and dry up the reservoirs of scientific and managerial manpower necessary to maintain American's technological leadership."

Recognition of Strong Chemical Industry

Recognition of the importance of a strong American chemical industry has been emphasized by government certification that $3,000,000,000 of expanded chemical capacity since 1950 was essential to national defense, he said.

In this connection Mr. Emmerich pointed out that the joint committee on defense production of the house and senate has reported, "Adding new capacity can be futile, however, unless the

—Continued on page 71

Manganese Research Effort Is Described in GSA Report

General Service Administration has made public a technical report on its progress with seven research studies designed to open the nation's resources of low-grade manganese to steel manufacturers at economic cost. The development program was undertaken to release the steel industry from dependence on foreign sources in a national emergency.

The report, prepared by the Emergency Procurement Service, which is carrying out the research through private contractors, recommends continuation of the program for at least eighteen months. All promising processes for extracting manganese have been included, and the program has been advanced with the advice of the materials advisory board of the National Academy of Sciences and the technical assistance of the Bureau of Mines. Nearly twenty new or unproven processes have been considered.

The studies are aimed largely at the three largest potential sources of domestic manganese—open-hearth slag; Aroostook County, Me., ores, and manganese-bearing iron ores in the Cuyuna range in Minnesota. In its conclusions, the report expressed the belief that the process for treating Cuyuna ores "will soon have demonstrated the practicability of that process for those ores." The report also indicated that Aroostook ores may respond to a combination of processes, leading off with preconcentration for subsequent treatment by other processes.

Synthetic Rubber Sales Topping All Expectations

Current sales of synthetic rubber are exceeding all expectations of the Federal Facilities Corporation and probably will reach a new high in the history of the agency during April by rising to 69,000 long tons, the monthly report on sales and production showed last week.

The agency said that the rising sales are believed to be brought about by the current high consumption of overall new rubber hydrocarbon and the increased price of natural rubber. All presently operating facilities are being run at full capacity, it was stated.

In taking account of the rising trend in consumption, it has been necessary for the agency to revise upward its earlier estimates and production and sales in the immediate months ahead. As against sales of 50,000 tons, forecast a month ago for February, the agency now estimates February sales at 58,000 tons, necessitating a step up in production during the month from 49,200 tons to 54,500 tons. March sales are now estimated at 66,000 tons instead of 62,000 tons and March production at 61,000 tons instead of 51,100 tons. April production is scheduled at 59,400 tons.

It is the aim of the agency to maintain an inventory of around 60,000 tons, but whereas the November 30 inventory amounted to 64,000 tons, it had dropped to 57,000 tons at the end of December, which further reflected the rise taking place in consumption.

Mineral Stockpile Results To Be Probed by Congress

A probe of the nation's stockpiling program to determine its adequacy will be commenced at an early date, it was decided last week by the senate interior and insular affairs committee.

Chairman James E. Murray of Montana will also serve as chairman of the seven-man subcommittee that will check into the effectiveness of the government's stockpiling program. One aim of the subcommittee's investigation will be to determine whether the stockpiling program is doing the job it is supposed to, and if it should be modified or augmented with other measure.

Antitrust Suit Rights Again Urged by Justice Department

The Department of Justice renewed its recommendations to congress last week that the government be given the right to sue for damages resulting from antitrust law violations. The proposal was contained in letters from Attorney General Herbert Brownell to Vice-President Nixon and Speaker Rayburn.

Existing law permits private persons to sue for treble the amount of damages sustained as a result of antitrust law violations, but the courts have held that this right does not extend to the government. The Attorney General's recommendation was that the law be modified to permit recovery of actual damages sustained by the government while continuing the right of private parties to sue for treble damages. A similar bill was before congress last session but failed to get beyond the introduction stage.

SCI Is Given Formula For Research Budgets

Proper budgets for research spring from well-conceived programs and not from blind following of rules or percentages, members of the American section of the Society of Chemical Industry were told last week in a paper prepared by Roger Williams, vice-president of E. I. duPont de Nemours & Co., and recipient at that time of the forty-ninth Perkin medal.

In the absence of Mr. Williams, the paper was read by Elmer K. Bolton, former director of duPont's chemical department and a past Perkin medallist, at the annual dinner meeting in the Waldorf-Astoria hotel, New York.

Crawford H. Greenewalt, duPont president spoke of the medallist's accomplishments and Dr. Wallace P. Cohoe, past president of the SCI, offered the medal. Clifford F. Rassweiler, vice-chairman of the board of Johns-Manville and chairman of the American section, presided.

End Product of Survey

"A good research program is the end product of rigorous survey, analysis and selection. In its preparation, first comes a survey of needs and opportunities, resulting in clear definition of objectives. Next, there must be a realistic analysis of the adequacy of the ideas and means available to reach each defined objective. Finally, the program for the budget period is formulated by highly selective choice among objectives, taking relative importance, relative timeliness, and relative feasibiilty all into account. The conversion of that program into dollars by multiplying programmed man-years by forecast cost per man-year will yield that budget which is justified by, and adequate for, the current needs and opportunities of the business," the paper stated.

"Only thereafter, if ever, should such crude yardsticks as 'research expenditure as percent of sales' be applied. Even then, such measurements must be subordinated to business judgment. The financial resources of the business may be such that a smaller budget is enforced. On the other hand, the mere availability of ample financial resources should never be reason to increase a budget beyond the figure necessary to support a research program determined as has been outlined.

'Magic Level' Cited

"There seems to be," the paper went on, "widespread concern that a budget which is sensibly above or below some magic level or standard, demonstrates faulty stewardship. We frequently see published reports of research expenditure expressed as a percentage of sales, such as one, three or five percent. These are usually accompanied by comment as to the progressiveness or backwardness, as the case may be, of the particular indus-

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Price Index Weakens

The overall OPD price index dropped 0.14 point last week to stand at 106.47. The essential oils market was disturbed by the deteriorating military situation in the Far East, and some oils coming from the vicinity of Formosa were affected. Java and Java-type citronella oil moved up, as did the Ceylon variety. The essential oils, aromatics, and flavorings market also witnessed an advance for black pepper, along with declines for Ceylon cinnamon, West Indian mace, niger seed, pimento, Italian sage leaves, and Bourbon vanilla beans. The reduction in vanilla beans was the first change in some months, but was not expected to show any prolonged downward trend for the material.

Choice white grease was higher in the oils, fats and waxes group, as were corn, cottonseed and soybean foots oils. The following acids advanced:—Coconut, corn, cottonseed, oleic, palm, soybean, stearic, and tallow. Reductions were noted for copra, cottonseed meal, greases and lard. Also lowered were oleo stearine, soybean meal, tallow, and several oils, including coconut, oiticica, oleo, and palm kernel. Aluminum metal moved up in the heavy chemicals section. The rise in price of saltcake and other sodium sulfates was made more uniform in the industry, as several producers raised prices to correspond with advances made January 1 by others.

Advances in the agricultural chemicals group were noted for dried blood in Chicago, bonemeal, castor pomace, and tankage. Dried blood, New York, declined, as did fishmeal and fishscrap. Refined fusel oil was advanced in the industrial organic chemicals group, and was followed by similar increases for fermentation grade amyl acetate. Copal gums were decidedly firmer, due to strength at the source. The grades advanced, as recorded in the protective coatings market, were Manilas, Philippines, and Pontianak.

Prices Advanced

Acid, coconut, 1c. per lb. (63).
Corn, ½c. per lb. (63).
Cottonseed, ½c. per lb. (63).
Oleic, ½c. per lb. (63).
Palm, ½c. per lb. (63).
Soybean, ½c. per lb. (63).
Stearic, ½c. per lb. (63).
Tallow, ½c. per lb. (63).
Aluminum, 1c. per lb. (36).
Amyl acetate, ferment. grade, 5c. per lb. (44).
Blood, dried, Chicago, 25c. per unit ton (42).
Bonemeal, $2 per ton (42).
Castor pomace, $2.50 per ton (42).
Fusel oil, 5c. per lb. (44).
Grease, choice, white, ½c. per lb. (63).
Gum, Copal, Manila, DBB, 2c. per lb. (64).
DK, dust, 2c. per lb.
MA, ½c. per lb.
Philippine, pale, nubs, 2c. per lb.
seeds, 1c. per lb.
sorts, ½c. per lb.
Pontianak, chips, 3c. per lb.
nubs, 1c. per lb.
Oil, citronella, Ceylon, 10c. per lb. (56).
Java, 25c. per lb.
Java-type, 25c. per lb.
Corn, foots, ¼c. per lb. (63).
Cottonseed, foots, ½c. per lb. (63).
Soybean, ¼c. per lb. (63).
Pepper, black, Malabar, 2c. per lb. (56).
Tankage, Chicago, 25c. per unit ton (42).

Prices Reduced

Blood, dried, New York, 25c. per unit ton (42).
Cinnamon, Ceylon, "0000," 2c. per lb. (56).
Copra, $7.50 per ton (63).
Cottonseed meal, $1 per ton (63).
Fishmeal, $4 per ton (42).
Fishscrap, $4 per ton (42).
Lard, ¾c. per lb. (63).
Mace, West Indian, 1c. per lb. (56).
Niger seed, 1c. per lb. (56).
Oleo stearine, ¼c. per lb. (63).
Oil, coconut, crude, ⅞c. per lb. (63).
Oiticica, ¼c. per lb. (63).
Oleo, ½c. per lb. (63).
Palm kernel, ¼c. per lb. (63).
Peanut, crude, 1¾c. per lb. (63).
Pimento, 1c. per lb. (56).
Sage leaves, Italian, 1c. per lb. (56).
Soybean meal, $2 per ton (63).
Tallow, edible, ¾c. per lb. (63).
Vanilla beans, Bourbon, 25c. per lb. (56).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100—1949 average)

January 21, 1955	January 14, 1955	January 22, 1954
106.47	106.61	107.44

FDA Makes Drugs Available For Over-the-Counter Sales

Two analgesic drugs which have been in wide use for a number of years, but available only on prescription of a physician, are to be transferred to the over-the-counter sales list by the Food and Drug Administration, the agency announced last week.

The drugs are n-acetyl-p-aminophenol (APAP), and sodium-2,5-dihydrooxybenzoate (sodium quentisate). Interested parties have been given thirty days within which to submit their comments to the agency on the matter.

Under the food and drug law no drug may be sold under the Rx legend which can, in the opinion of the FDA, be safely used under adequate direction. The effect of removing the drug from the prescription list will be to require manufacturers to show adequate directions for use on the label, along with necessary cautionary statements such as a warning against administering the drug to children under six years of age, and against prolonged use unless under the supervision of a physician. The sale of the drug over-the-counter will also be permitted in cases of mixtures of the drug with other drugs sold over the counter.

Meanwhile, in New Jersey a bill has been introduced in the senate to legalize over-the-counter sale of medicinal products which are not habit-forming, poisonous or otherwise dangerous, without direct supervision of registered pharmacists. Sen. Harold W. Hannold, sponsor of the measure, said, it implements a recent New Jersey Supreme Court decision which urged such legislative revision of the 1901 pharmacy act and makes the act conform with the federal drug regulations as well as the law of other states.

DuPont Starting Construction Of New Rubber Laboratory

Construction will start immediately on a new rubber sales-service laboratory costing approximately $2,800,000, it has been announced by E. I. duPont de Nemours & Co., Wilmington, Del. This marks the fourth laboratory for the company's Chestnut Run site near Wilmington since the property was acquired two years ago.

The new laboratory is designed exclusively for sales development and technical service of the company's rubber chemicals division. It will enable duPont to broaden its sales-service activities, which for the past thirty-three years have been conducted at its rubber laboratory at Deepwater Point, N.J., and will provide technical service in the application and use of such products as neoprene, "Hypalon" chlorosulfonated polyethylene, rubber chemicals, and "Hylene" organic isocyanates.

Testing and processing facilities will be of the latest type for the liquid and dry rubbers, including equipment for milling, calendering, extrusion, and vulcanization. There will be a series of separate laboratory areas for isocyanates, cement, paper, dry polymer processing, latex, physical testing, and consumer product testing.

Rubber Plant Sale Report Is Due in Congress Today

The report of the Rubber Facilities Disposal Commission on the program for selling the government's synthetic rubber plants to private industry is scheduled to be submitted to congress today, three days in advance of its due date. The main item of interest in the report will be the prices to be received by the government by the plants. Names of the prospective buyers have heretofore been announced. (OPD, 12/27/54 and 1/3/55).

The fact that the report is being submitted to congress ahead of the deadline date is believed to indicate that the contracts negotiated by the commission have met with no objections from the Department of Justice from the standpoint of compliance with the antitrust laws. Under terms of the disposal law, congress will have sixty days within which to veto all or any part of the disposal program.

Polyethylene Item Offered By Semet-Solvay Division

Emulsifiable type A-C polytheylene is now available in limited quantities for evaluation on plant run scales, the Semet-Solvay Division of Allied Chemical & Dye Corporation, New York, has announced.

Possible applications include liquid coatings for glass, paper, boxboard, textiles, and leather. The product also has a potential as an ingredient in floor and shoe polish formulations and other protective coatings. Prices are quoted delivered in the United States and range from 40 cents to 52 cents a pound depending upon grade and quantity.

Diamond Research Center Modernization Plan Begun

Diamond Alkali Company, Cleveland, Ohio, is modernizing and enlarging certain key facilities of its research center in Painesville, Ohio, at a cost of approximately $200,000 to meet the expanding needs of the firm's fundamental and applied research programs. Contract for the project has been awarded to the Hubert Rust Construction Company, of Painesville, which already has started to work on the job. Completion is expected by early spring.

Chipman Chemical Company Marketing New Weed Killer

A non-selective weed and grass killer for industrial, agricultural and railroad use has been announced by Chipman Chemical Company, Inc., Bound Brook, N. J. The product is called "Chlorea" and, in contrast with most other weed killers, it kills all types of vegetation, Chipman pointed out.

"Chlorea" is a uniform, non-separating combination of sodium chlorate, borate and CMU, combining the effectiveness of chlorate on deep-rooted weeds with the prolonged soil-surface action of CMU on shallow-rooted grasses and annual seedling growth. It also has a lasting residual effect to inhibit regrowth, the producer said.

Mallinckrodt Introduces New Low-Sodium Chemical Line

A new line of low-sodium chemicals for use in pharmaceutical preparations has been introduced by Mallinckrodt Chemical Works, St. Louis, Mo. Sodium in these chemicals is said to be controlled to a maximum of 0.01 percent. In addition to those low-sodium items already supplied, Mallinckrodt plans to add other chemicals to its low-sodium line for pharmaceutical manufacturing.

Ethyl Technical Coordinator Appointed to Defense Post

Appointment of J. B. Macauley, director of technical coordination for Ethyl Corporation, New York, as deputy assistant Secretary of Defense for research and development has been announced by the Department of Defense. Mr. Macauley will be on leave of absence from Ethyl during his year of tenure with the government. He will succeed Dr. Daniel P. Barnard, research coordinator of Standard Oil Company (Indiana), who is expected to return to his company within the next few months.

Mr. Macauley, who joined Ethyl in 1945 as director of engineering research at the Detroit, Mich., research laboratories is widely known in both the automotive and petroleum industries.

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Minerals Unit Formed To Check on Supplies

An Office of Minerals Mobilization has been established within the Department of the Interior to check on the adequacy of supplies of certain metals, minerals and facilities to meet civilian and military requirements. Felix E. Wormser, assistant Secretary for Mineral Resources, has been given supervision over the office.

Secretary of the Interior Douglas McKay explained that the new office will carry out functions authorized by the defense production act of 1950 which have been delegated to Secretary McKay by the President with respect to strategic and critical metals and minerals, including solid fuels. In this respect, the office will operate similarly to the division of oil and gas which is responsible for matters pertaining to petroleum and natural gas. The defense minerals exploration administration will continue to operate as a separate organization as at present.

Functions of Office

The functions which the new office will perform are:—

(1) Developing, assembling and evaluating data as to the productive capacity and supplies of products from both domestic and foreign sources.

(2) Recommending establishment or modification of expansion goals, and developing and recommending expansion programs, including advice concerning financial incentives and aids for overcoming shortages of capacity or supply.

(3) Analyzing problems involved in maintaining an adequate mobilization base and recommending necessary action programs including legislation.

(4) Developing, assembling and evaluating data as to materials, equipment, transportation and other requirements of the metals and minerals industries.

(5) As requested by the Office of Defense Mobilization, assembling data on requirements for metals and minerals products as presented by, or obtained on behalf of other Federal agencies.

(6) Formulating necessary foreign mineral exploration and development programs.

(7) Developing and maintaining programs, including the promulgation of the necessary orders and regulations for the operation of the industries and cooperat-

—*Continued on page 55*

Gasoline Testing Lab Plans Announced by Ethyl Corp.

Plans for building a gasoline testing laboratory in Houston, Tex., to provide immediate service for refiners in that area, have been announced by Ethyl Corporation, New York. The structure is scheduled to be completed this year. The new Houston laboratory will be equipped with the most modern devices, including an x-ray photometer. Under an Ethyl-developed technic, this instrument can be used to determine the tetraethyl lead content of a gasoline sample in about six minutes, far less time than is required by present chemical methods.

In Cyanamid Managerial Post

H. C. Little has been named assistant general manager of American Cyanamid Company's agricultural chemicals division, New York. He replaces Horace V. Cory, who has retired after thirty-two years' service with the company. Mr. Little was formerly assistant to the president and director of employee and public relations. He has been with Cyanamid since 1929, when he joined the firm's legal staff.

Dow Chemical Establishes Subsidiary in Netherlands

The Netherlands Minister of Economic Affairs has granted Dow Chemical Company, Midland, Mich., permission to establish a wholly-owned subsidiary company, to be known as Nederlandsche Dow Maatschappij, N.V., in Rotterdam, Netherlands, Dr. Leland I. Doan, Dow president, has announced. The subsidiary will import, manufacture and sell domestically and abroad a variety of chemicals, plastics and magnesium metal, Dr. Doan said.

The new company plans to build a manufacturing plant as well as tank storage, warehouse and dock facilities on a fifty-acre tract leased for twenty years in the Third Petroleum Harbor at Rotterdam. The harbor is now being completed by the Port of Rotterdam, and construction on the plant site is expected to begin about mid-1955. Among the products the firm plans to process are "Styron," Dow's polystyrene plastic; magnesium alloys; glycols, including the products known under the trade-mark of "Dowanols," and certain other chemicals now undergoing economic study.

Monsanto Offers Adipic Acid

Monsanto Chemical Company, St. Louis, Mo., has come into the market as the second major supplier of adipic acid with the announcement that this resin intermediate is available in commercial quantities from its organic chemicals division. the new set-up, Ultra's offices will remain

Gen'l Aniline Makes Three Key Organizational Changes

Coincident with the expected completion this year of two new manufacturing plants, General Aniline & Film Corporation, New York, last week made three key organizational changes in its dyestuff and chemical division.

The two plants are a $6,000,000 acetylene products facility being erected in Calvert City, Ky., and a $5,000,000 chlorine-

Dr. William L. Walsh

caustic installation under construction at Linden, N. J. In addition, manufacturing facilities for "Gafite," General Aniline's new plastic, are being installed at the Rensselaer, N. Y., plant.

Dr. William L. Walsh, plant manager at Linden, was appointed manager of manufacturing in charge of all production operations at all the company's dyestuff and chemical plants. Dr. Joseph W. Lang, director of research at the company's Easton, Pa., laboratory, was named divisional director of research with responsibility for all research and development. Dr. A. O. Zoss, technical manager at Lin-

—*Continued on page 55*

Intermediates Now Made On Large Scale by Carbide

The first large commercial production of a group of reactive intermediates—acrolein dimer and its derivatives, alpha-hydroxyadipaldehyde, hexane-triol-1, 2, 6, and tetrahydropyran-2-methanol — has been announced by Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation. Although these products have been known as laboratory chemicals in the past, commercial availability makes their use on an industrial scale economically feasible, Carbide pointed out.

Acrolein dimer, with its aldehyde group and ethylenic linkage, is a starting material for the preparation of synthetic resins and the synthesis of chemicals for textile finishing, paper treating, rubber compounding, and pharmaceutical and plesticizer manufacture. Alpha-hydroxy-adipaldehyde is supplied as a stable 25 percent aqueous solution because of its high reactivity. Its three reactive groups make it an important intermediate for chemical synthesis and resin manufacture, according to Carbide. As a dialdehyde it is useful as an insolubilizing agent for proteins and polyhydroxy materials and a cross-linking agent for polyvinyl acetal and polyvinyl acetate, it was added.

Hexanetriol-1, 2, 6 is of general interest as an alkyd and polyester resin intermediate and as a softener, moistening agent, and solvent. Through reaction of its hydroxyl groups it is expected to be useful in the preparation of plasticizers, polyurethane resins, foamed isocyanate resins, driyng oils, and special low-temperature lubricants. Tetrahydropyran-2-methanol is of interest in the preparation of plasticizers and pharmaceuticals, and as a specialty solvent.

Morehouse Owners Buy Cowles Dissolver Business

G. H. Morehouse and L. P. Smoot, owners of Morehouse Industries, Los Angeles, have purchased the dissolver business of Cowles Company, Cayuga, N. Y. The purchase includes the plant facilities, land, buildings, machinery, inventory and equipment. The Cowles dissolver is a specialized type of machinery designed to accomplish dissolving of particles of material in solution at exceptionally high speed. The general manager of the dissolver manufacturing facilities under the new owners, operating as Cowles Dissolver Company, will be Horton N. Meyer, Jr.

Drug Statute Overhaul Is Urged for Additives

A revamping of the nation's food and drug law was suggested by Lawrence Coleman of Allied Chemical & Dye Corporation, New York, at last week's joint chemicals-in-foods meeting of the Commercial Chemical Development Association and the Chemical Market Research Association, held at the Edgewater Beach hotel, Chicago.

From a chemical industry viewpoint, Mr. Coleman said, the present law has two major weaknesses. First of all, he pointed out, the Food and Drug Administration does not regulate all food additives and, therefore, is unable "to procure the knowledge of the use or . . . even the knowledge of the existence of a new ingredient claimed to be beneficial (unless it is a food color) until long after it has become a part of the general diet."

The second weakness, he felt, may be found in the philosophical basis of the original statute, "namely, that certain substances are, and others are not, poisonous and deleterious per se." A corollary of this, he went on, is "the use of the word 'harmless' as the necessary attribute of a certified food color where 'harmless' has been administratively determined to mean 'zero toxicity'."

Recognition of Beneficial Effect

It was Mr. Coleman's view that congress should be urged to recognize that there are many materials "which when added to food will have a profound beneficial effect in the preservation of our food supply, but cannot, if their use is controlled, have any damaging effect to health even though they fall within that class of materials fuzzily designated as 'poisonous or deleterious'."

He also proposed that the Commissioner of Foods and Drugs be given advance notice of the use of all additives so that FDA may, if it decides that the safety of any given material has not had enough pre-testing, ban its use. "Such amendment to the law," Mr. Coleman declared, "would require the manufacturer of either the additive or the food, before the food containing such additive is offered for sale, to underiake a research program which adequately tests this new ingredient on a toxicological and pharmaceutical basis and establishes tolerances for its use."

Carrying this discussion forward, Henry F. Smyth, jr., of Carbide & Carbon Chemicals Company, New York, and the Mellon Institute for Industrial Research, Pittsburgh, Pa., indicated that four major points must be recognized in testing the safety of a dietary ingredient.

Tests With Humans Limited

First, he said, experimentation with humans must be kept on a very limited basis, with almost all of the testing confined to experimental animals. Secondly, it must be understood that testing is done on a relatively small number of animals, while the food ingredients might be consumed by the entire population. Although researchers start with a definite idea of how much of the ingredient is proposed for addition to a specific item, he went on, they do not know how much will be ingested by individual members of the

—*Continued on page 58*

Union Oil Names Hartley To Succeed Retired V.P.

Claude E. Swift, vice-president in charge of research and process for Union Oil Company of California, has retired and Fred L. Hartley, manager of commercial development of research for the company, has been named general manager of research and process, succeeding Mr. Swift.

The retired vice-president joined Union Oil as a research chemist in 1926. He was named manager of research in 1947 and was appointed a vice-president the following year. Mr. Hartley has been with Union Oil for sixteen years as manufacturing process supervisor in charge of process design. He was named manager of a new commercial development division established by the company late in 1953 after serving the previous three years as general superintendent of operations at Union's Los Angeles refinery.

Witco Acquires Half of Ultra

Witco Chemical Company, New York, has acquired a half interest in the outstanding capital stock of Ultra Chemical Works, Inc., Paterson, N. J. Ultra is a manufacturer of waxes, synthetic detergents and chemical specialities. Under the new set-up, Ultra's offices will remain at Paterson.

Preservatives, Color Agents Seen Under Stricter Rules in Germany

Reports received from Germany by the Department of Commerce disclose that the German government is considering tightening its restrictions on the use of chemical preservatives and coloring agents on citrus fruits and no longer regards processes now in use for treating the fruit to be harmless.

In its issue of *Foreign Commerce Weekly* for January 17, the department stated that a circular issued by the German Association of Fruit, Citrus Fruit, and Vegetable Importers indicated that German authorities are viewing both thiourea and biphenyl with suspicion when used for treating the fruit.

Seen as Health Hazard

The circular quotes private sources as stating that "it is to be anticipated that the committee of experts, which deals specifically with questions concerning preservation and chemical treatment, will arrive at the conclusion that any treatment with thiourea compounds, is harmful to health." It adds that if such treatment is used, the mere indication of preservation by individual marking will not be sufficient and it is possible that the marketing of fruit so treated will be generally prohibited.

Biphenyl, an antiperishing preparation which the Food and Drug Administration in the United States does not consider deleterious in the amounts now commonly used, also has come in for criticism from the German committee of experts.

Paper Alone Called Harmful

The circular states, "The use of biphenyl paper is regarded as harmful to health. Even if the preservation media are not applied to the fruit itself and only the wrapping paper is treated with biphenyl, enough of it penetrates the skin of the orange so that the biphenyl can be analyzed in the orange."

The report also says that changes in the utilization of fruits—squeezing them for juice, for instance, or using the peel—mean that additives to the skin no longer can be regarded as noninjurious since the chemical products automatically enter the end product, resulting in "changes in taste and other serious health-injurious processes."

The association requests that no biphenyl paper be used until the situation is clarified.

In conclusion the association requests its members, in placing orders and delivery contracts, to point out that objections from the health authorities are to be expected in the marketing of chemically-treated citrus fruits.

The association indicates that prohibitions on the use of some agents on imported fruit may be announced shortly.

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SUN MON TUES WED THU FRI SAT

... include these Reilly Chemicals in your '55 Production Calendar

1 Pyridine-N-oxide

2 Pyridine

3 2-Picoline-N-oxide

4 4-Picoline-N-oxide

5 2,6-Lutidine-N-oxide

6 2-Ethanol-pyridine

7 2-Propanol-pyridine

8 4-Propanol-pyridine

9 4-Vinyl-pyridine

10 2-Vinyl-pyridine

11 Isonicotinic Acid

12 Methyl Isonicotinate

13 2,6-Lutidine

14 2,4,6-Collidine

15 2-Bromo-pyridine

16 4-Picoline

17 2-Ethynyl Butanol-2

18 Methyl Butyn-2-ol

19 o-Cresol

20 Cresols

21 1,3,5-Xylenol

22 Cresylic Acid

23/30 2-Picoline

24/31 2-Amino-pyridine

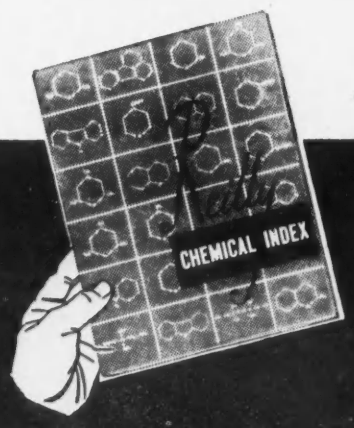
25 1-Methyl-naphthalene

26 2-Methyl-naphthalene

27 Pyrene

28 Naphthalene

29 Anthracene



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Association Meetings

This Week

American Coke and Coal Chemicals Institute, regional meeting, Drake hotel, Chicago, January 27.

Antitrust Law Section, New York State Bar Association, annual meeting, Bar Association House, New York, January 26.

Association of American Soap and Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 25-28.

Chemical and Allied Product Buyers' Group of National Association of Purchasing Agents, Commodore hotel, New York, January 25.

Chlorine Institute, annual meeting, Biltmore hotel, New York, January 26.

Food, Drug and Cosmetic Law Section, New York State Bar Association, annual meeting, Bar Association House, New York, January 27.

Plant Maintenance and Engineering Show, International Amphitheatre, Chicago, January 24-27.

Air Pollution Control Association, annual meeting, Detroit, Mich., May 22-26.

American Association of Textile Chemists and Colorists, Atlantic City, N. J., September 22-25.

American Drug Manufacturers Association, annual meeting, Boca Raton Club, Boca Raton, Fla., April 13-15.

American Foundation for Pharmaceutical Education, annual meeting, New York, March 3.

American Institute of Chemical Engineers, Kentucky hotel, Louisville, Ky., March 20-23; Shamrock hotel, Houston, Tex., May 1-4; annual meeting, November 27-30, Statler hotel, Detroit, Mich.

American Oil Chemists' Society, annual meeting, Roosevelt hotel, New Orleans, La., April 17-20.

American Pharmaceutical Association, annual convention, Miami Beach, Fla., May 1-6.

American Pharmaceutical Manufacturers Association, central section meeting, Edgewater Beach hotel, Chicago, February 7-9; western section meeting, Ambassador hotel, Los Angeles, February 14-15; annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8; mid-year meeting, Waldorf-Astoria hotel, New York, December 12-14.

American Society for Testing Materials, committee week, Netherland Plaza hotel, Cincinnati, Ohio, January 31-February 4; annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 26-July 1.

American Water Works Association, annual conference, Chicago, June 12-17.

Armed Forces Chemical Association, annual meeting, Cleveland hotel, Cleveland, Ohio, June 16-17.

Association of Consulting Chemists and Chemical Engineers, symposium, Belmont Plaza hotel, New York, April 26; all-day forum and annual meeting, Belmont Plaza hotel, New York, October 25.

Chemical Institute of Canada, protective coatings division conference, Royal York hotel, Toronto, February 24, Ritz Carlton hotel, Montreal, February 25; chemical engineering division conference, Ottawa, March 7-9; annual conference and exhibition, Quebec City, Quebec, May 30-June 1.

Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 18-19.

Chemical Specialties Manufacturers Association, mid-year meeting, Drake hotel, Chicago, May 15 to 17.

Drug, Chemical and Allied Trades section of the New York Board of Trade, mid-winter luncheon, Waldorf-Astoria hotel, New York, February 3; annual dinner, Waldorf-Astoria hotel, New York, March 3; Pocono Inn, Pocono Manor, Pa., September 22-25.

Federal Wholesale Druggists Association, mid-year meeting, Statler hotel, New York, March 3-4; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., September 11-14.

Flavoring Extract Manufacturers Association, annual meeting, Edgewater Beach hotel, Chicago, May 22-25.

Manufacturing Chemists Association, annual outing in conjunction with SOCMA, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-11.

National Farm Chemurgic Council, annual chemurgic conference, Deshler-Hilton hotel, Columbus, Ohio, March 22-24.

National Pest Control Association, Purdue Pest Control Operators' Conference, Purdue University, West Lafayette, Ind., January 31-February 4; Southern Pest Control Operators' Conference, Louisiana State University, Baton Rouge, La., January 31-February 2; Eastern Pest Control Operators' Conference, University of Massachusetts, Amherst, Mass., February 3-5.

National Petroleum Association, spring meeting, Cleveland, Ohio, April 13-15; annual meeting, Atlantic City, September 14-16.

National Vitamin Foundation, symposium, Biltmore hotel, New York, March 1.

Packaging Machinery Manufacturers Institute, semi-annual meeting, Palmer House, Chicago, April 16-17; annual meeting, The Homestead, Hot Springs, Va., September 15-18.

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, William Penn hotel, Pittsburgh, Pa., February 28-March 4.

Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 22-25.

Synthetic Organic Chemical Manufacturers Association, regular monthly luncheon meeting, Commodore hotel, New York, February 9; annual outing in conjunction with MCA, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-11.

Toilet Goods Association, annual meeting, Waldorf-Astoria hotel, New York, May 10-12.

Chemical Buyers Told Low Costs, Not Low Prices, Should Be Goal

Good purchasing achieves the lowest costs, not the lowest prices. This theme ran through the one-day meeting held last week in Chicago's Palmer House by the Chemical and Allied Products Buyers' Group of the National Association of Purchasing Agents.

Repeatedly, the thought was expressed that it is unsound practice to accept a price too low to permit a normal profit to the supplier. Not only may uneconomic pricing destroy sources of supply, it was pointed out, but it also can deplete technical service and quality control, upon which chemical buyers have come to rely. Through careful study of the market and accurate knowledge of materials processes, it was indicated, a chemical purchasing agent can work with his suppliers to achieve the lowest economic costs for both.

Chemical Cost-Price Analysis

Chemical cost-price analysis is a factual tool for buyers, it was pointed out by J. W. McKinney, assistant division purchasing agent for E. I. duPont de Nemours & Co., Wilmington, Del. He added that it is generally more helpful when applied to products in large volume, and is of little use in small-volume operations. This is so, Mr. McKinney said, because most chemicals are produced from several basics and many of them are inter-related.

Cost-price analyses, it was stressed, can show major market trends and may lead to the creation of new markets for products not previously competitive. They may help avoid long-term commitments with producers who may become uneconomic under changes in the market situation, Mr. McKinney declared.

There is no standard mark-up for chemicals he continued, adding that no two companies figure chemical costs in the same way. One man's finished product is another's raw material, he asserted. The speaker went on to give a long series of examples of cost-price analysis. Individual decisions are always necessary, he stressed, for frequently it is possible to lower materials costs appreciably by starting up production of certain basics. However, he warned that this may lead to a greatly increased plant cost.

Soda Ash, Caustic Soda Markets

Dr. H. G. Johnson, director of development for Monsanto Chemical Company's research and development division, St. Louis, Mo., told the P. A.'s what to watch out for in the soda ash, caustic soda, acetone, rosin and ethanol markets. He pointed out that soda ash and caustic have gone through two major chemical process changes. "Mining of natural resources has really never been a factor in the production of soda ash," Dr. Johnson declared, adding that "today's market is completely dominated by so-called by-product or co-product caustic from the chlorine industry."

Although rosin should theoretically follow an agricultural product pattern, it was pointed out that "historically it hasn't." This, Dr. Johnson felt, "is unusual and represents a product which is what we would call not representative of the chemical industry."

Acetone, the speaker went on, was first primarily a product of fermentation, which process brought on a number of price rises and falls. However, Dr. Johnson pointed to the fact that the pattern of end-uses has changed some over the years, and the fermentation process has given way to the direct synthesis from propylene. In the speaker's view, "Today we are witnessing a change again in that the co-product from phenol may well dominate the price market."

Ethanol Situation Detailed

Ethanol, also primarily produced by fermentation at first, has recently undergone a change, it was emphasized. "It has been slowly replaced by direct synthesis from ethylene," Dr. Johnson explained, "the reasons, of course, being the pressure for less fluctuation in price and the increased competitive position of synthetic ethanol because of fundamental changes in raw material supply, that is, development of other more lucrative uses for molasses."

Paul Meeske, assistant director of purchases for Dow Chemical Company, Midland, Mich., advised the chemical industry to look toward toluol and xylol isomers as promising raw materials. He also felt that it would be well for the petroleum industry "to encourage the development of new uses for these aromatics by incentive pricing to achieve an overall balance of markets which could mean a great deal to their economy in the long run, especially if gas turbine engines are successfully introduced for automotive use."

It was the speaker's view that the alternative to this kind of pricing, which he termed "realistic," would be the spurring of large-scale coal hydrogenation, lignite and oil-shale processing plants. Once built, Mr. Meeske observed, these installations would subject the petroleum industry to further competition of a by-product nature.

Buying as Part of Production

Eugene A. Moss, vice-president of Swift & Co., Chicago, called attention to the fact that most companies look upon their purchasing department as part of the production team.

"The trend," he said, "has strongly been in that direction. The best accepted practice in well-managed companies is to bring the purchasing department into the discussions in the early stages and the buyers in the purchasing department usually play a vital part in bringing a new activity to a satisfactory conclusion."

Mr. Moss felt that the chemical buyer can gain the maximum in effectiveness only if he operates as a member of the management. "I don't care what company he is affiliated with," he asserted, "or what the products may be. He may act on specific instructions and he no doubt often feels circumscribed by them. But unless he knows more than just specifications and bid taking, he can't do more than half his job."

The speaker termed the chemical buyer "the eyes and ears of the company he serves." Such a man, he pointed out, "is the avenue for new ideas. The things he discovers may very well influence the future of his company. The alert buyer has opportunities not available to the man whose assignment is confined within the four walls of his plant."

Market Research Technics

Parker Frisselle, manager of Dow's market research department, gave a brief outline of market research technics that a chemical buyer might find useful in studying a chemical. In the first place, he pointed out, one must have some basic information sources, but these, he added, provide only about 10 percent of the answer to a given question.

"With the knowledge of how the material is used and what other kinds of companies will use it," he explained, "the purchaser must strike out to these other companies, sit down and discuss with them their use, the extent of it, and the likelihood that it will change in the future. After he has talked to all the principal users he returns to his own com-

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SAACI's New President

John F. Henry of Adams-Henry Chemical Company, Rutherford, N. J., last week was installed as the new president of the Salesmen's Association of the American Chemical Industry. At the same time, E. L. Collins of Chilean Nitrate Sales Corporation assumed the association vice-presidency, while Vincent L. Rebak of Grace Chemical Company and R. J. Roberts of Emery Industries, Inc., became treasurer and secretary, respectively. New SAACI directors are:—Robert L. Williams of Givaudan-Delawanna, Inc.; Sherod B. Scott of Wyandotte Chemicals Corporation; Henry B. Clark of Diamond Alkali Company; Robert H. Kampschulte of Celanese Corporation of America, and Gerald S. Furman of George Uhe Company.

Eastern Pest Control Operators Parley Set

A program of wide interest to the pest control industry has been arranged for the fifteenth annual eastern pest control operators' conference, to be sponsored by the National Pest Control Association and the University of Massachusetts at the university, in Amherst, Mass., February 3 through 5.

During the opening session the following papers will be presented:—"Some Problems of Resistant Species and How to Meet Them," by Dr. Philip J. Spear, technical director of NPCA; "Diazinan and Related Insecticides," by Dr. Jack Horsfall, consultant to Geigy Company; "Parathian, Malathion and Related Compounds," by T. O. Tufe, entomologist with American Cyanamid Company; "Dipterex, Chlorthion," by Dr. Rosmarie von Rumker, entomologist with Chemagro, Inc., and "Hazards in the Use of Organic Phosphate Insecticides and How to Avoid or Minimize Them," by Dr. Lloyd W. Hazelton, pharmacologist with Hazelton Laboratories.

Rodent Control A Topic

Howard A. Merrill, district agent for the Fish and Wildlife Service, will preside at an afternoon session on "Specific Problems in Rodent Control." The following papers will be presented:—"What Can We Do to Control Pigeons, Starlings and Sparrows?" by Dr. Spear and Mr. Merrill; "Mole Control for the PCO," by Clarence Faulkner and "Rat Control, 1955," by John C. Jones. This will be followed by a question and answer period.

R. E. Kious, director of public relations for the NPCA, will conduct a forum on "Public Relations" at a session scheduled for the evening of the opening day.

"Potential Profits from Present Headaches," will be the topic of the program during the morning and afternoon of the second day. These papers will be pre-

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APMA's Central Section Plans Its Chicago Meeting

Dr. Lloyd C. Miller, director of revision of the Pharmacopoeia of the United States, will be one of the featured speakers during the first day of the central section meeting of the American Pharmaceutical Manufacturers' Association, to be held February 7 through 9 at the Edgewater Beach hotel, Chicago. Dr. Miller will discuss salient features of the upcoming USP XV.

Modern methods in drug company's analysis will be presented by Dr. Harold A. Nash of Pitman-Moore Company's research laboratories, and Dr. Takeru Higuchi professor of pharmacy at the University of Wisconsin. Treatment of atherosclerosis will be the subject of Dr. Robert E. Shipley, of Lilly Laboratories for Clinical Research. Dr. L. J. Meduna, of the University of Illinois School of Medicine, will talk on the present clinical status of drugs used in psychiatry.

February 8, will be devoted to production problems. Round tables will be held on maintenance cost control, sterile solution manufacture, new equipment and technics, and communication between management and employees. Moderators will be R. T. FitzSimon, of Abbott Laboratories; Robert Johnson, of Armour Laboratories; Darwin Kaestner, of Lakeside Laboratories, and Dr. Jack Purinton, of G. D. Searle & Co.

The marketing section of the meeting

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Parenteral Drug Ass'n Re-Elects Dr. Ashkenaz

Dr. David M. Ashkenaz, of the Wyeth Pharmaceutical Division of American Home Products Corporation, Philadelphia, has been re-elected president of the Parenteral Drug Association for 1955.

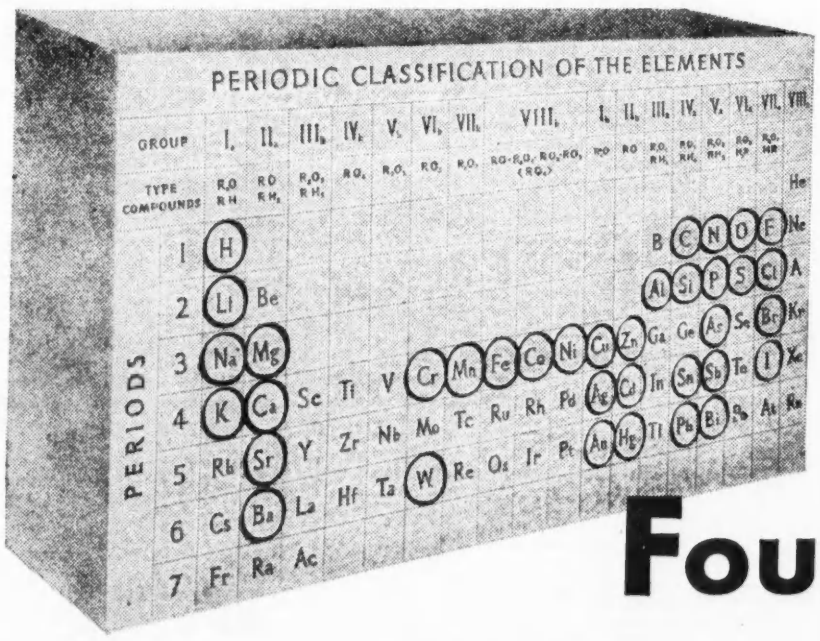
Other officers recently elected were:—Eastern vice-president, Dr. Harold Blumberg, Endo Products, Inc.; western vice-president, William S. Bucke, Lafayette Pharmacal Company, Lafayette, Ind.; secretary, F. C. Ninger, Warner-Chilcott Laboratories, New York, and treasurer, L. James Graham, Burroughs-Wellcome & Co. New directors include:—John Henderson, Chase Equipment Corporation; Joseph F. Greene, Kimble Glass Company, and Dr. Anton K. Maier, Sandoz Chemical Works.

NACA Moving Its Office

The National Agricultural Chemicals Association will move from 910 17th street, N.W., to suite 603-604 in the Associations Building, 1145 19th street, N.W., Washington 6, D.C., on February 1. The telephone number remains STerling 3-2833.

LOOK TO MALLINCKRODT FOR YOUR CHEMICAL NEEDS IN THE COMPOUNDS OF . . .

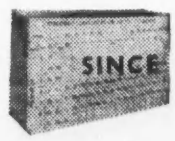
H															
Li												C	N	O	F
Na	Mg									Al	Si	P	S	Cl	
K	Ca	Cr	Mn	Fe	Co	Ni	Cu	Zn				As		Br	
	Sr						Ag	Cd			Sn	Sb		I	
	Ba	W					Au	Hg			Pb	Bi			



the Foundation

Many factors
are involved in the final quality of a product
in the process industries. The inside story of many difficulties, however,
is often imperfect starting materials – chemicals, for example.
They are the foundation.
Let something go wrong at the beginning and there is often no cure,
no way to avoid trouble, expense and rejections. That's why so many concerns
start with Mallinckrodt chemicals. They're exactly right, always dependable,
and most chemicals you might need are immediately available.
In case they are not now in stock, in case you need special chemicals
to meet specific problems – Mallinckrodt will help you in a hurry
with the right chemical in the right physical form.
An important advantage of a chemical plant like Mallinckrodt's is flexibility
of research and production facilities.

Mallinckrodt®

SERVING THE PROCESS INDUSTRIES  SINCE 1867

Mallinckrodt Chemical Works

Manufacturers of chemicals for industrial, medicinal, photographic and analytical uses

MALLINCKRODT STREET, ST. LOUIS 7, MO. 72 GOLD STREET, NEW YORK 8, N. Y.

CHICAGO • CINCINNATI • CLEVELAND • LOS ANGELES • PHILADELPHIA • SAN FRANCISCO • MONTREAL • TORONTO

Current Market Quotations

Chemicals and Related Materials

All matters under this heading fully protected by copyright.

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, January 21 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views.

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A

Acacia (see Gum arabic).

Acenaphthene, below 92.5 C., m.p., dms. works lb. 40 - —
above 92.5 C., m.p., bbls., dms., works lb. .41 - .50

Acetaldehyde, 99%, dms., c.l., frt. equald lb. .1250- .1435
l.c.l., frt. equald lb. .1350- .1535
tanks, frt equald lb. .1050- .1300

Acetaldol (see Aldol).

Acetanilide, tech., bbls., c.l., dlvd. lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .30½- —

USP, bbls., 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 - .86

Acetic anhydride, dms., c.l., dlvd. E. lb. .15½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —

Acetoacetanilide, fib. dms., c.l., dlvd. lb. .80 - —
l.c.l., dlvd lb. .81 - —

Acetoacet-o-chloroanilide, fib., dms., c.l., dlvd. lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —

Acetoacet-o-toluidide, fib., dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —

Acetone, CP, dms., c.l., dlvd. lb. .09½- —
l.c.l., dlvd. lb. .10½- —
tanks, dlvd. lb. .07½- —

Methyl (see M).

Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —

Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 - 1.19

Acetophenone cns., dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —

N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85

Acetyltributyl citrate tech. dms., c.l., works lb. .33½- —
l.c.l., works lb. .34½- .38½
tanks, works lb. .32 - —

Acetyltriethyl citrate, tech., dms., c.l., works lb. .37½- —
l.c.l., works lb. .38½- —
tanks, works lb. .36 - —

Acid, abietic, coml., dms., c.l., works lb. .12 —
l.c.l., ex whse lb. .1490- —
cryst., dms., c.l., works lb. .06½- —
l.c.l. works lb. .07 - .07½

Acetic, coml., or redist., 28%, bbls. 100 lbs. 4.80 - —
56%, bbls 100 lbs 8.25 - —
70%, bbls 100 lbs. 9.95 - —
80%, bbls 100 lbs.10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs.15.00 -16.00
tech., dms., c.l., dlvd 100 lbs.12.00 - —
l.c.l., same basis 100 lbs.13.00 - —
tanks, dlvd 100 lbs.10.00 - —
USP cbys., inclusive, dlvd., 100 lbs.24.00 -25.00

Acetic anhydride (see Acetic anhydride above).

Acetylsalicylic, USP special, bbls., 1,000-lb. lots, makers, primary distrib., point of shipt lb. .63 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (80 mesh), bbls., 1,000-lb. lots. lb. .58 - .60

Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

Adipic, fib, dms., c.l., dlvd. lb. .35 - —
l.c.l., dlvd lb. .37¾- —

Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.73

p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77

USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works lb. 2.55 - 2.60

p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.00 - —
smaller lots, same basis lb. 4.05 - 4.50

Anthranilic, bbls., frt. equald lb. 1.21 - —

Arsenous, tech., (see Arsenic, white).

USP (see Arsenic trioxide).

Ascorbic USP dms., 25-50 kilo lots. kilo.16.00 - —
10-kilo lots kilo.16.35 - —
5-kilo lots kilo.16.75 - —
bots 1-kilo lots kilo.17.00 - —
500-gram lots kilo.17.50 - —

Battery, cbys. c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45

Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms. 100-lb. lots or more lb. .54 - —

Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).

Betaoxynaphthoic (see Acid, b-Oxynaphthoic).

Boric, tech. 99½%, cryst., bgs., c.l., works ton.124.25 —
ton lots, ex whse., N. Y. or Chi ton.172.00 —
smaller lots, same basis, ton.177.00 —
bbls., c.l., works ton.148.75 —
ton lots, ex whse., N. Y. or Chi ton.196.50 —
smaller lots, same basis, ton.201.50 —
gran., bgs., c.l., works ton.99.25 - —
ton lots, ex whse., N. Y. or Chi ton.147.00 —
smaller lots, same basis, ton.152.00 —
bbls., c.l., works ton.123.75 —
ton lots, ex whse., N. Y. or Chi ton.171.50 —
smaller lots, same basis, ton.176.50 —
bulk, c.l., works ton.94.25 - —

Acid, boric, tech., powd., bgs., c.l., works ton.104.25 - —
ton lots, ex whse., N. Y. or Chi ton.152.00 —
smaller lots same basis, ton 157.00 —
bbls., c.l., works ton.128.75 - —
ton lots, ex whse., N. Y. or Chi ton.176.50 —
smaller lots same basis, ton 181.50 —

Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric acid $25 per ton higher.

Broenners bbls lb. 1.76 - —

Butyric, 99%, dms., c.l., works, lb. .34 - —
l.c.l., works lb. .34½- —
tanks, works lb. .32½- —

Cacodylic, bots lb.10.50 -13.00

Camphoric, nat., dms lb. 4.00 - 4.75
syn., dms. lb. 4.00 - 4.75

Capric, dms lb. .23¾- .25½

Caprylic, dms lb. .23¾- .25½

Cassella, dms., frt. alld., 100% basis lb. 1.44 - 1.75

Castor oil, split, dms lb. .35½- .36

Chicago, bbls. frt alld lb. 3.21 - —

Chloroacetic, mono-, purif., flake, 99½, dms lb. .23½- .25½
tech., flake, 96-97%, frt. equald, dms lb. .20 - .21

o-Chlorobenzoic, fib. dms., works lb. 1.13 - —

p-Chlorobenzoic, fib dms., works lb. 1.59 - 1.62

Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —

Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.

Cholic, 100-lb. lots, fib. dms. lb. 6.00 - 6.25

Chromic 99¾%, dms., c.l., works lb. .27½ - —
l.c.l., works lb. .28 - .29

NF (see Chromium trioxide).

Cinnamic, refd., bots lb. 2.50 - 3.50

Citric, USP, anhyd., gran., fine gran. dms., c.l. lb. .28¾- —
10,000-lb. lots, 1 shipt. lb. .29¼- —
smaller lots lb. .29¾- .31¼

hydrous, gran. fine gran., dms, c.l lb. .27 - —
10,000-lb. lots, 1 shipt. lb. .27½- —
smaller lots lb. .28 - .29½

Powdered citric acid ½c. higher.

Acid, Cleve's, mixed bbls lb. .79 - —
Coconut oil, dist., dms lb. .25¼- .27
tanks lb. .23½- —
dbl. dist., dms lb. .26 - .27¾
tanks lb. .24¼- —
Corn oil, dist., dms lb. .15½- .17¼
tanks lb. .1350- —
Cottonseed oil, dist., dms lb. .1500- .1675
tanks lb. .1325- —

2,3-Cresotic, dms., ton lots, works. lb. .66 - —
smaller lots lb. 1.82 - 2.00

Cresylic, coaltar, dom., 50% 207° C or above, ret. dms., c.l., frt. equald gal. .98 - —
l.c.l., same basis gal. 1.03 - —
non-ret., dms., c.l., same basis gal 1.01 - —
l.c.l. same basis gal. 1.04 - —
tanks, same basis gal. .90 - —
204° to 207° C., ret., dms., c.l., same basis gal. 1.03 - —
l.c.l., same basis gal. 1.08 - —
non-ret., dms., c.l. same basis gal. 1.06 - —
l.c.l., same basis gal. 1.09 - —
tanks, same basis gal. .95 - —
imp. 75% at 215° C. or over, dms., ex whse gal. .75 - .90
petroleum, dom., 195° to 213° C, non-ret., dms., c.l., San Francisco and Los Angeles gal. .71 - —
l.c.l., same basis gal. 73 - .75
tanks, same basis gal. .58 - —
200° C. to 222° C., tanks, Wilmington, Cal gal. .58 - .63
211° C. to 236° C., non-ret., dms., c.l., San Francisco and Los Angeles gal. .63 - —
l.c.l., same basis gal. .65 - .67
tanks, same basis gal. .50 - —
220° C. to 242° C., tanks, Wilmington, Cal gal. .50 - .53
245° C. to 298° C., tanks, Wilmington, Cal gal. .46 - —

Crotonic, fib. dms., 200 lbs. or more, works lb. .50 - —

Cyanoacetic, tech., bbls lb. .90 - 1.25

Dehydrocholic, injection fib dms., 100-lb. lots lb.14.75 - —
oral, fib. dms., 100-lb. lots lb.10.25 - —

Desoxycholic, fib. dms, 100-lb. lots. lb.15.00 - —

Dichlorophenoxyacetic (see under D 2,4 D).

Diethylbarbituric (see Barbital).

Diglycolic, bgs., works lb. .14 - —

Acid, 2-ethyl hexoic, dms., c.l., works lb. .36½- —
l.c.l., works lb. .37½- —
tanks, works lb. .34½- —

F, crude, paste, bbls., works lb. 2.10 - —

Folic, bots, fib. cns kilo-lots or more gram. 1.40 - —

Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775

Fumaric, tech., bgs., dms lb. .27 - .28

Gallic, NF VII, bbls., 1,000-lb. lots lb. 1.80 —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb. lots lb. 1.58 - —
smaller lots lb. 1.69 - 1.78

Gamma, dry, grd., bbls., frt. alld. lb. 1.50 - —
paste, bbls., frt alld lb. 1.45 - —

Gentisic, 100-lb. fib. dms lb. 8.50 - —

Gluconic, tech., 50% bots lb. .25 - .35
cbys. lb. .19 - —
dms. lb. .15½- —

l-Glutamic, 99½% fib. dms., 100 lb lots works lb 2.45 - 2.53
25-lb. lots, works lb. 2.54 - 2.60

Glycerophosphoric, 35%, dms., works lb. 2.25 - 2.35

Glycolic (see Acid hydroxyacetic).

H, dry, bbls., works, 100% basis, lb. .82 - —
paste, bbls., works, 100% basis, lb. .80 - —

Hydriodic, 1.50 s.g., cbys lb 2.94 - —
1.70 s.g., cbys lb. 3.23 - —

Hydrobromic, medicinal, 48%, cbys., dlvd E lb .37 - .43

Hydrochloric, anhyd. (see Hydrogen chloride).

18° cbys., c.l., works 100 lbs. 2.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt equald ton.28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 3.15 - 4.00
tanks, works, frt. equald ton.30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - 4.50
tanks, works, frt. equald ton.35.00 - —

CP, USP, consumers, cbys., extra c.l., works lb. .11¾- —
l.c.l., same basis lb. .13¼- .13¾
5 pint bots., extra, cs., c.l., same basis lb. .16¾ —
l.c.l., same basis lb. .18¼- .19¼

Acid, hydrochloric, CP, USP prices to dealers 1½c per lb less.

Hydrocyanic, cyls., frt. alld lb. .75 - 95
dilute, NF 2% 5 lb bots lb. 40 —

Hydrofluoric, anhyd. (see Hydrogen fluoride).
tanks, works lb. .21 - —
70%, steel dms., works lb. .18½- .22½

Hydrofluosilicic, basis 30%, dms., works lb. .06 - —

Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb. .095 - —

Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32

USP, cbys lb. .88 —

Isonicotinic, 100 lb fib dms, works lb. 5.00 - —

Hydrazide (see Isoniazid).

J, bbls., works, 100% basis lb. 2.50 - 2.85

Koch, bbls., frt. alld lb. .64 - .70

L, bbls., works lb. 1.25 - —

Lactic, edible, 50%, bbls., 20 or more lb. .20 - —
smaller lots lb. .205 - .21
80%, bbls., 5 or more lb. .364 - —
smaller lots lb. .369 - .3699
USP, 85%, cbys lb. .88 - —
plastic grade, 50%, bbls., 20 or more, works lb. .2175- —
1 to 19 lb. .2225- —
80%, bbls., 5 or more lb. .3815- .3818
tech., 22%, bbls., c.l., works 100 lbs. 6.30 - —
l.c.l., works 100 lbs. 6.70 - —
cbys., l.c.l., works 100 lbs.12.20 - —
44%, bbls., c.l., works 100 lbs.11.95 -11.98
l.c.l., works 100 lbs.12.35 -12.50

Laurent's, bbls lb. .60 - —

Lauric, 90%, dms lb. .35¼- .37

Linseed oil, dist., dms lb. .2025- —
w. w., dms lb. .2325- —

Maleic, cryst., powd., dms lb. .37 - .38

Malic, tech., dms lb. .50 - —

Mandelic, NF, dms., 1,000-lb. lots, lb. 2.33 - —
smaller lots lb. 2.40 - 2.50

Metanilic, dms., works lb. .57 - .75

Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½- —
smaller lots, works lb. .55 - —

Molybdic, 85-92%, dms., works lb. 1.32 - —

Monochloroacetic, purif. (see Acid, Chloroacetic mono-).

Muriatic (see Acid, hydrochloric).

Myristic, dms lb. .28 - .29¾

Naphthenic, 220-230 acidity, dms., works lb. .13¼- —
tanks, works lb. .11¼- —

Naphthol (1)-4-sulfonic (see Acid Nevile and Winthers).

Naphthol(1)-5-sulfonic (see Acid, L).

Naphthol(1)5-sulfonic,8-amino (see Acid, S).

Naphthol(1)-3,6-disulfonic,8-amino (see Acid H).

Naphthol(2)-6,8-disulfonic (see Acid, Gamma).

(5)-7-Sulfonic,2-amino (see Acid, J).

Naphtholsulfonic, mixed (see Acid, Cleve's, mixed).

Naphthylamine(1)-5-sulfonic (see Acid, Laurent's).
(2)-6-sulfonic (see Acid, Broenner's).
(2)-7-sulfonic (see Acid, F).
(2)-1-sulfonic (see Acid, Tobias).

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
a.p.a.	available phosphoric acid
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystal
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructive-distilled
dl-	dextro-laevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
liq.	liquid
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

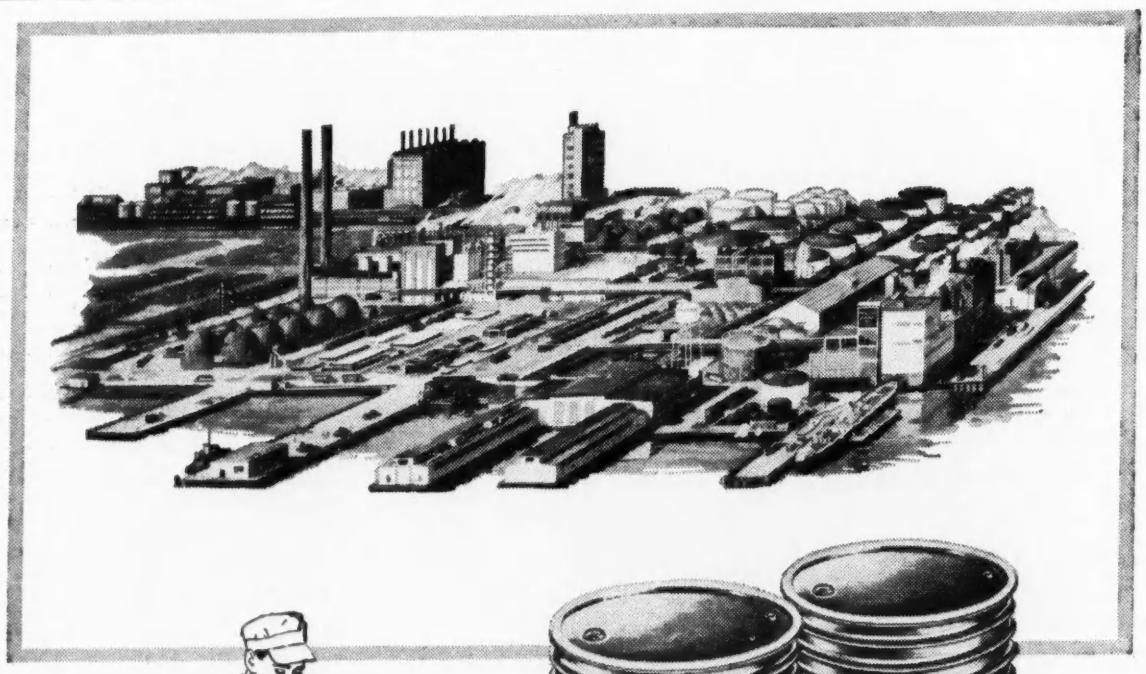
Acid, Nevile and Winther's—Alcohol, Ethyl, 190 Pf.

Acid, Nevile and Winther's, dms., frt. alld lb. 1.20 - —
Nicotinic, USP, dms., frt. adjusted kilo 9.00 9.30
Amide, USP, (see Nicotinamide).
Nitric 36° Be chys., c.l., works, E. 100 lbs. 5.75 - —
l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be chys., c.l., works, E. 100 lbs. 6.25 - —
l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, chys., c.l., works, E 100 lbs. 6.75 - —
l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be chys., c.l., works, E. 100 lbs. 7.25 - —
l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP NF, consumers, chys., extra c.l., works lb. .13½ - —
l.c.l., same basis lb. .15 - .15½
5 pint bottles extra, cs., c.l., same basis lb. .17½ - —
l.c.l., same basis lb. .19 - .25
p-Nitrobenzoic, dms., c.l., works lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .1775- .1950
tanks lb. .1600- —
dbl. dist., (white), dms lb. .2025- .22
tanks lb. .1850- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Cresotic).
Oxalic, bbls., c.l., works lb. .16½ - —
10,000-lb. lots, works lb. .16¾ - —
smaller lots, works lb. .17¾ - —

Acid, b-oxynaphthoic, bbls., works, lb. 1.14 - —
Palm oil, dbl., dist., dms lb. .14½- .16¼
Para-aminobenzoic (see Acid, p-Aminobenzoic)
Para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst. cns. lb. .75 - 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see Acid, mandelic).
Phosphoric, food grade, 75% chys. c.l., works 100 lbs. 7.30 - —
l.c.l., works 100 lbs. 7.80 - 8.30
tanks, works 100 lbs. 5.10 - —
NF, 85% chys., c.l., works lb. .08¼- —
l.c.l. works lb. .09 - .09½
Picric, NF, bbls. lb. .60 - —
tech., bbls. lb. .34 - .35
Propionic, syn., pure, dms., c.l., works lb. .21 - —
l.c.l., works lb. .22 - —
tanks, works lb. .19 - —
Pyrogallic, NF, (see Pyrogallol).
tech., bbls lb. 2.76 - 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb. 3.25 - —
Salicylic, crude, fib. dms lb. .37 - —
sublimed, tech., fib. dms., c.l. lb. .39 - —
l.c.l. lb. .46 - —
dyestuffs grade, fib. dms lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib. dms lb. .53 - —
Sebacic, purif., dms., c.l., works, lb. .64 - —
l.c.l., works lb. .66 - .70

Acid, soybean oil, dbl. dist., dms. lb. .1775- .20
tanks lb. .1600- —
s.d., dms lb. .1625- .1775
tanks lb. .14½- —
Stearic, dbl. pressed, bgs lb. .1475- .1650
single pressed, bgs lb. .1425- .1575
triple-pressed, bgs lb. .1700- .1850
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech., dms., c.l., frt. alld lb. .19 - —
l.c.l., frt. alld lb. .21 - —
Sulfuric, 60° Be, chys., c.l., works 100 lbs. 2.00 - —
l.c.l., works 100 lbs. 2.45 - —
tanks, works ton 18.60 - —
66° Be, chys., c.l., works 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, consumers chys, extra, c.l., works frt. equald lb. .09¾- —
l.c.l., same basis lb. .11¼- .11¾
5 pt. bots., extra, cs., c.l., works, frt. equald lb. .13¼ - —
l.c.l., same basis lb. .14¾- .20¾
Oleum, 20%, tanks, works ton 25.00 - —
40% tanks, works ton 29.00 - —
65% tanks, works ton 39.50 - —
Tallow, dist., dms lb. .14½- .1625
hydrogenated, bgs lb. .1375- .16
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb. 1.59 - 1.60
smaller lots lb. 1.65 - 1.76
powd., bbls., 1,000-lb. lots lb. 1.50 - —
smaller lots lb. 1.51 - 1.69
tech., dms lb. .95 - —

Acid, tartaric, USP, dom., 230 or 250-lb. dms., c.l. lb. .41 - —
10,000-lb. lots, 1 shipt. lb. .41½- —
smaller lots lb. .42 - —
100-lb. dms lb. .43 - —
small dms lb. .45 - .51
imp., bgs lb. .36½ Nom.
Thioglycolic, refd., chys., 100% basis lb. 1.80 - 1.86
Tobias, bbls., frt. alld lb. .74 - —
Toluenesulfonic, dms., c.l., works, lb. .16 - —
l.c.l., works lb. .17½- —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see under "T" 2,4,5T)
Tungstic, tech., kgs., works lb. 4.25 - —
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Aconitine, cryst., potent, bots oz. 78.00 -85.00
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½- —
Acrylonitrile, dms., c.l., works lb. .33 - —
l.c.l., works lb. .34 - —
tanks, works lb. .21 - —
ACTH, cryst., bulk, 1,000 units/gram, bots gram 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 2.90 - 3.10
powdered, 30 mesh, fib., dms lb. 3.40 - 3.50
dl-Alanine, dms., works lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms., c.l. lb. .65 - .90
Egg, edible, flake, bbls lb. 1.30 - 1.33
powd., bbls. lb. 1.35 - 1.37
tech., cryst., bbls lb. .85 - .87
Alcohol, allyl, dms., c.l., dlvd. lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°132°C., dms., l.c.l., dlvd lb. .43 - —
ACS grade, dms., c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .17 - —
l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .15 - —
primary, dms., c.l., frt. alld. lb. .19¼- —
l.c.l., frt. alld lb. .20¼- —
tanks, frt. alld lb. .17¼- —
sec-synthetic, dms., c.l., frt. alld., works lb. .18 - —
l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
tert-synthetic, dms., c.l., frt. alld. E. lb. .17 - —
l.c.l., frt. alld. E lb. .18 - —
tanks, frt. alld. E lb. .15 - —
1-pentanol, (syn. normal), dms., c.l., works lb. .42 - —
l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment., dms., l.c., frt. alld lb. .15 - —
l.c.l., frt. alld lb. .16 - —
tanks, frt. alld lb. .13 - —
n-synthetic, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
sec-synthetic, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, works lb. .12 - —
Capryl, 85%, dms., c.l., works lb. .18 - —
l.c.l. works lb. .18½- —
tanks, works lb. .16½- —
95%, dms., c.l., works lb. .19½- —
l.c.l., works lb. .20 - —
tanks, works lb. .18 - —
Cetyl, extra fin. cns., 500-lb lots or more lb. .73 - —
smaller lots lb. .80 - 1.15
NF, fib. cns., 140-lb lots or more lb. .58 - .82
smaller lots lb. .59 - .82
Cinnamic, bots lb. 2.15 - 2.75
Decyl, bots lb. 1.75 - 2.00
indust. (see 1-Decanol).
Denat., CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis gal. .59½- .65¼
tanks, dlvd. same basis, gal. .41½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.
Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.
SD1, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66¼
tanks, same basis gal. .42½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66¼
tanks, same basis gal. .42½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis gal. .59½- .65¼
tanks, same basis gal. .41½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.
Diacetone, acetone-free, dms., c.l., dlvd lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
tech., dms., c.l., dlvd lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies. gal. 20.48 - —
l.c.l., same basis gal. 20.53 - 20.59
tanks, same basis gal. 20.35 - —
tax free, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —



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BUTYL ALCOHOL, NORMAL
ETHYL ACETATE
ETHYL ALCOHOL
AMYL ACETATE
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Alcohol, ethyl, absolute, 200 pf., tax paid, dms., c.l., dlvd. E. of Rockies . . gal. 21.53 - —
l.c.l., same basis . . gal. 21.63 - 21.69
tanks, same basis . . gal. 21.45 - —
2-Ethylbutyl, dms., c.l., works . . lb. .29½ - —
c.l. works . . lb. .30 - —
tanks, works . . lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E. lb. .23¾ - —
l.c.l., same basis . . lb. .24¾ - —
tanks, same basis . . lb. .21¾ - —
Furfuryl, cns., works . . lb. .29 - —
dms., c.l., Cedar Rapids, Ia. . lb. .21 - —
Newark, N. J. . . lb. .21½ - —
l.c.l., Cedar Rapids, Ia. . . lb. .22 - —
Newark, N. J. . . lb. .22½ - —
tanks, Memphis, Tenn. . . lb. .184 - —
Isoamyl, dms., c.l., works, frt. alld. E. . lb. .34 - —
l.c.l., same basis . . lb. .35 - —
tanks, same basis . . lb. .32 - —
Isobutyl, dms., c.l., dlvd. . . lb. .14 - —
l.c.l. dlvd. . . lb. .15 - —
tanks, dlvd . . lb. .12 - —
Iso-octyl, dms., c.l., dlvd. E lb. .23 - —
l.c.l., dlvd. E. . . lb. .24 - —
tanks, dlvd. E . . lb. .21 - —
Isopropyl, refd., 91%, dms., c.l., dlvd . . gal. .48 - —
l.c.l., dlvd . . gal. .55 - —
tanks, dlvd. . . gal. .35 - —
95% dms., c.l., dlvd. . . gal. .50 - —
l.c.l., dlvd . . gal. .57 - —
tanks, dlvd . . gal. .37 - —
99% dms., c.l., dlvd. . . gal. .52 - —
l.c.l., dlvd . . gal. .59 - —
tanks, dlvd . . gal. .39 - —
Lauryl, bots. . . lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Carbinol, methyl-isobutyl).
Octyl, perfumer's grade, bots . . lb. 1.75 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms. . . lb. 1.14 - 1.45
standard, dms. . . lb. 1.26 - 1.35
n-Propyl, dms., c.l., dlvd. . . lb. .12 - —
c.l., dlvd . . lb. .13 - —
tanks, dlvd . . lb. .10 - —
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa lb. .54 - —
dms., c.l., Niagara Falls, N. Y. lb. .44½ - —
l.c.l., Newark, N. J., Cedar Rapids, Ia lb. .47 - —
tanks, Niagara Falls, N. Y. lb. .43 - —
indust. grade, dms., c.l., Niagara Falls, N. Y lb. .305 - —
l.c.l., Newark, N. J., Cedar Rapids, Ia lb. .33 - —
tanks, Niagara Falls, N. Y. lb. .29 - —
Wood (see Methanol)
Aldol, 95%, dms., works . . lb. .23 - —
denaturing grade, dms. . . gal. 2.15 - —
Aldrin, 60% soln., dms., c.l., works, frt. alld lb. .538 - —
l.c.l., works, frt. alld lb. .588 - —
Aletris root, bgs. . . lb. 1.75 - 1.85
Algin (see Sodium alginate).
Allethrin, 90%, dms., frt. alld . . lb. 28.80 - 28.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld . . lb. .95 - 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works . . lb. 1.35 - 1.40
Chloride, dms., c.l., dlvd. . . lb. .17 - —
l.c.l., dlvd . . lb. .18 - —
tanks, dlvd . . lb. .15 - —
Starch, solid, dms., works . . lb. .52¾ - .54¾
solution, 40%, toluol-butanol, dms., works lb. .25½ - .26¼
Aloe, Cape, cs. . . lb. .40 - —
powd., cs. . . lb. .50 - —
Curacao, kgs. . . lb. .50 - .55
Socotrine, kgs. . . lb. No prices
Aloin, USP, bbls., dms., kgs . . lb. 3.75 - 3.82
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works . . 100 lbs. 5.05 - —
powd., dms., works . . 100 lbs. 5.20 - —
USP, burnt, dms. . . lb. .20 - .21
hydrous, dms. . . lb. .07¾ - .08
Potassium, gran., bgs., works, 100 lbs. 4.55 - —
lump, dms., works . . 100 lbs. 5.30 - —
powd., dms., works . . 100 lbs. 5.45 - —
USP, burnt, dms. . . lb. .20 - .21
hydrous, dms. . . lb. .07¾ - .08
Potash-chrome, dms. . . lb. .17 - —
Sodium, dms., c.l., works . . 100 lbs. 4.60 - —
l.c.l. works . . 100 lbs. 5.00 - —
Alumina, calcined, bgs., c.l., works, lb. .0385 - —
l.c.l., works . . lb. .0410 - .0510
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .15 - —
l.c.l., works, frt. equald. lb. .1550 - —
cryst., dms., c.l., works . . lb. .1450 - —
l.c.l., works . . lb. .1500 - —
soln., 32°, cbys., c.l., works . . lb. .0445 - —
l.c.l., works . . lb. .0520 - .1295
tanks, works . . 100 lbs. 3.45 - —
NF, gran., dms., works . . lb. .29 - .31
Fluoride, tech., anhyd., bgs., c.l., works . . lb. .15¾ - —
l.c.l., works . . lb. .16¾ - .18¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., cbys. . . lb. .09½ - —
l.c.l., works . . lb. .10 - —
Hydrate, heavy bgs., c.l., frt. equald lb. .0305 - —
2,000-20,000 lb. lots, same basis . . lb. .0405 - —
light bgs. dlvd lb. .17 - —
Hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, fib., dms., works lb. .82½ - —
contract, works lb. .79½ - —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .232 - —
pigs, 10,000-lb. lots, frt. alld. lb. .215 - —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .63½ - —
standard, 200-lb. dms. . . lb. .43 - —
Powder, lining extra fine, dms lb. 1.02½ - —
standard, 250-lb. dms. . . lb. .72 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dm., 1½c. per lb for 50-lb dm. 3c per lb. for 10-lb. can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs. 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs., and 4c. for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., 2.1% Al, dms., frt. alld lb. .30 - —
Stearate, dibasic, ctns., c.l. . . lb. .33 - —
l.c.l. . . lb. .34 - .37
monobasic, ctns., c.l. . . lb. .33 - —
l.c.l. . . lb. .34 - .37
tribasic, ctns., c.l. . . lb. .33 - —
l.c.l. . . lb. .34 - .37

Aluminum sulfate, coml., bulk, c.l., works . . 100 lbs. 1.85 - —
grd., bgs., c.l., works . . ton. 37.00 - —
lump, bgs., c.l., works . . ton. 40.00 - —
iron-free, bgs., c.l., works, frt. equald . . 100 lbs. 3.55 - —
l.c.l., works, frt. equald 100 lbs. 3.95 - —
USP, gran., dms., works . . lb. .16 - .18
powd., dms., works . . lb. .22 - .24
Trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. . . oz. 8.90 - 10.00
Aminoazotoluene, base, bbls., 100% basis lb. 1.03 - 1.18
o-Aminobiphenyl, dms., c.l., works, lb. .32½ - —
l.c.l., works . . lb. .33 - —
tanks, works . . lb. .31 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½ - —
l.c.l., dlvd. . . lb. .45 - —
tanks, dlvd . . lb. .45 - —
2-Amino-2-methyl-1-propanol, cns., dms., works lb. .60 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
smaller lots . . lb. 2.50 - —
p-Aminophenol, dms., frt. alld . . lb. .97 - .98
Aminophylline, USP, 100-lb. dms lb. 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald . . ton. 85.00 - 88.00
pure cyls., extra, zone 1 lb. .18½ - —
2 . . lb. .19 - —
3 . . lb. .19½ - .20
4 . . lb. .20 - —
5 . . lb. .21 - —
refrigeration tanks, works, frt. equald . . ton. 87.50 - 90.50

Ammonia, aqueous (29.4% NH_3), dms., c.l., dlvd. Metropolitan area . . 100 lbs. 3.60 - —
l.c.l., works 100 lbs. 4.00 - —
tanks, works, anhyd. basis. ton. 96.00 - —
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 8.65 - 11.15
white gran. (see Ammonium chloride, tech.)
Ammoniacal liquor, tanks, works, anhyd. basis ton. 96.00 - —
Ammonium acetate, purif., dms lb. .38 - —
Benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, gran., dms., c.l., works, ton. 317.00 - —
ton lots, ex whse . . ton. 390.50 - —
smaller lots, ex whse . . ton. 395.50 - —
Bicarbonate, dom., dms., c.l., works 100 lbs. 6.50 - —
l.c.l., works . . 100 lbs. 8.00 - —
imp., dms., l.c.l. . . lb. .07¼ - .08¼
Bichromate, dms., works . . lb. .42 - .43
Bifluoride, dms., dlvd . . lb. .2145 - .2245
Bromide, NF, gran., bbls . . lb. .38 - .39
dms. . . lb. .39 - .42
Powdered ammonium bromide 10c. per lb. higher.
Carbonate, USP, lump, powd., dms lb. .23 - .24
Chloride, tech., white, fines, gran., bgs., c.l., works . . 100 lbs. 5.25 - —
l.c.l., works . . 100 lbs. 7.00 - —
USP, gran., bbls., dms. . . lb. .17¼ - —
Citrate, dibasic, bbls. . . lb. .75 - —
dms. . . lb. .80 - .85
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).

Ammonium hydroxide (see Ammonia, aqueous).
Hypophosphite, NF, dms . . lb. 3.07 - —
Iodide, NF, dms., bots . . lb. 4.26 - 4.38
Linoleate, 80%, dms., works, lb. .50 - .55
Nitrate dom., fertilizer grade, 33.5% N., bgs., western, works, frt. equald ton. 68.00 - 70.00
with dolomite, 20.5% N, bgs., Hopewell, Va ton. 51.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equal to $6 per ton. 74.50 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton. 84.89 - —
Oxalate, fine gran., dms . . lb. .26½ - .31
Pentaborate, gran., dms., c.l., works ton. 227.00 - —
ton lots, ex whse . . ton. 300.50 - —
smaller lots, ex whse . . ton. 305.50 - —
Ammonium pentaborate powder, $10 per ton higher
Perchlorate, kgs., works . . lb. .50 - .75
Persulfate, kgs . . lb. .38 - —
Phosphate, coml., bgs., c.l., works, frt. equald lb. .0865 - —
c.l., same basis lb .09 - —
dibasic, NF V bots. dms lb. .45 - —
tech., bgs., c.l. works, frt. equald lb. .0865 - —
l.c.l., same basis . . lb. .0915 - —
Salicylate, NF, dms., kgs . . lb. 1.62 - 1.64
Silicofluoride, dms works lb. .11 - .12
Sulfamate, bbls., bgs., c.l., t.l., works lb. .18 - —
l.c.l., works . . lb. .22 - —
Sulfate, coke-oven, bulk, producing ovens ton. 42.00 - 47.50
syn., bgs., c.l., western, works, ton. 44.00 - —
bulk, works . . ton. 42.00 - —
purif., dms., works . . lb. .08½ - .10

The Buffalo Electro-Chemical Company, Inc. and the Becco Sales Corporation have been merged with Food Machinery and Chemical Corporation. Effective January 1, 1955 they will operate as "Becco Chemical Division", Food Machinery and Chemical Corporation.

The personnel with which Becco customers are familiar will continue to operate Becco Chemical Division. Customer service, research and production will prevail at the same high level as for more than 25 years past.

BECCO® BRIEFS

PEROXYGEN CHEMICALS

The properties of Becco Peroxygen chemicals, and their current and potential uses, are described in a large number of detailed and authoritative bulletins. Send for your copy of Becco's Bulletin List.

Becco Peroxygen products include Hydrogen Peroxide, Peracetic Acid, Sodium Carbonate Peroxide, Sodium Pyrophosphate Peroxide, Urea Peroxide, Calcium Peroxide, Magnesium Peroxide, Zinc Peroxide, Potassium Persulfate, Ammonium Persulfate, Acetyl Peroxide, Sodium Perborate.

BECCO CHEMICAL DIVISION
® fmc FOOD MACHINERY AND CHEMICAL CORPORATION
STATION B, BUFFALO 7, N.Y.
BUFFALO • BOSTON • CHARLOTTE • CHICAGO
NEW YORK • PHILADELPHIA • VANCOUVER, WASH.

Please send me the Becco Bulletin List from which we may select bulletins of interest to us.

Name .....
Company .....
Street ..... Zone ..... State .....
City .....

Ammonium Sulfide—Betaphenylethylamine

Ammonium sulfide, liq., 40-44%, dms., c.l., frt. equald., 100% basis ton 240.00 - —
l.c.l., works, 100% basis ton 300.00 —
tanks frt alld. 100% basis ton 180.00 —
Sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .26
Thioglycollate, coml., cbys., 100% basis lb. 1.60 - —
highly purif., cbys., 100% basis lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, fib cms. frt alld lb. .65 —
60% soln., dms., c.l., works lb. .03½ —
d-Ampetamine hydrochloride dibasic, bots lb. 28.00 - —
di, dms lb. 6.00 - —
d monobasic, bots lb. 28.00 - —
d-Phosphate, dibasic, bots lb. 28.00 - —
di, cms lb. 6.00 - —
d-Sulfate, dms lb. 28.00 - —
di, dms lb. 6.00 - —
Amyl acetate ex fusel oil, tech., frt. alld. E. of Rockies lb. .20 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .23 - —
ex pentane, reg., dms., c.l., dlvd. lb. .17 - —
l.c.l. same basis lb. .18 - —
tanks same basis lb. .15 - —
tech., dms., c.l., dlvd. lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
Alcohol (see Alcohol amyl).
Amyl n-butyrate, dms. lb. .90 - 1.25
Cinnamic aldehyde, dms lb. 1.70 - 2.00
Nitrite, USP, bots lb. 1.75 - 1.83
Salicylate, cns., dms lb. .74 - 1.05
o-tert-Amyl phenol, dms., c.l., works, lb. .43¾ - —
l.c.l., works lb. .46¾ - —
tanks, works lb. .41¾ - —
p-tert-Amyl phenol, dms. c.l., works, lb. .24¾ - —
l.c.l., works lb. .25¾ - —
tanks, works lb. .23¼ - —
Anethole, NF, cns., dms lb. 1.25 - 1.55
tech., dms lb. .75 - 1.20
Angelica root, dom., bls lb. .60 - .70
Aniline oil, dms. c.l. works, frt. alld. lb. .21 - —
l.c.l., works, frt. alld lb. .22 - —
tanks, works, frt. alld lb. .20 - —
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld lb. .31 - —
l.c.l., same basis lb. .33 - —
Anise, Mexican, bgs. lb. .30 - —
Spanish, bgs. lb. .38 - —
Syrian, bgs. lb. No prices.
Anisic aldehyde, bots. dms. lb. 2.80 - 2.70
o-Anisidine, dms., works lb. .88 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs. lb. .24 - —
powd., dms. lb. .28 - —
Anthracene, 90-95%, bbls., ton-lots, works lb. .70 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5%, bbls, c.l., frt. alld lb. .83 - —
l.c.l., same basis lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines lb. .28½ - —
cs., c.l., mines lb. .29 - —
Antimony oxide, bgs., c.l., frt. alld. lb. .29 - —
l.c.l., frt. alld lb. .30½ - —
Sulfide, approx. 60%, bgs., dlvd lb. .27 - .30
Trichloride, anhyd., pails, c.l., works lb. .38½ - —
l.c.l., works lb. .40½ - —
USP, powd., dms lb. .64 - .65
Antimony-potassium tartrate, tech., gran., powd., dms. lb. .59 - .62
Antipyrine, NF, dms lb. 2.50 - 2.70
Apomorphine hydrochloride, USP, bots oz. 23.40 - 23.90
Areca nuts, powd., bbls lb. .15 - .16
Arecoline hydrobromide, NF, bots, tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms., 1-kilo lots kilo 74.80 - 83.00
Argols, min. 50%, bgs., shipt. ports per 100 kilos, 100% basis 25.00 - —
Arnica flowers (true montana), bls. lb. 3.00 Nom.
Arsenic metal, lump, bbls., ex whse. lb. .54 - —
Trioxide, USP, dms lb. .48 - —
White, powd., bbls., c.l., dvld lb. .05½ - —
l.c.l., dlvd lb. .06½ - .07¼
Asafetida, cs. lb. .36 - .39
powd., bbls., dms lb. .50 - .53
Asbestine (see Talc, fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton 1,300.00 - —
No. 2, c.l. (20 tons), mines ton 675.00 - —
Run-of-mine, c.l., (20 tons), mines ton 556.00 - —
3K, c.l. (20 tons), mines ton 436.00 - —
3R, c.l. (20 tons), mines ton 371.00 - —
3T, c.l. (20 tons), mines ton 348.00 - —
4Z, c.l. (20 tons), mines ton 321.00 - —
4K, c.l. (20 tons), mines ton 173.00 - —
4M, c.l. (20 tons), mines ton 173.00 - —
4T, c.l. (20 tons), mines ton 156.00 - —
Asbestos, Canadian, crude, 4Z, c.l. (20 tons), mines ton 156.00 - —
5D, c.l. (20 tons), mines ton 122.50 - —
5K, c.l. (20 tons), mines ton 122.50 - —
5M, c.l. (20 tons), mines ton 116.50 - —
5R, c.l. (20 tons), mines ton 110.00 - —
6D, c.l. (30 tons), mines ton 78.00 - —
7D, c.l. (30 tons), mines ton 68.50 - —
7F, c.l., (30 tons), mines ton 65.00 - —
7H, c.l. (30 tons), mines ton 55.00 - —
7K, c.l. (30 tons), mines ton 46.00 - —
7M, c.l., (30 tons), mines ton 40.00 - —
7R, c.l. (30 tons), mines ton 39.00 - —
7RF, c.l. (30 tons), mines ton 40.00 - —
7T, c.l. (30 tons), mines ton 37.00 - —
7TF, c.l. (30 tons), mines ton 40.00 - —
8S, c.l., (30 tons), mines ton 27.00 - —

Asbestos c.l. prices are in U. S. funds, l.c.l., lots, $4 per ton higher.

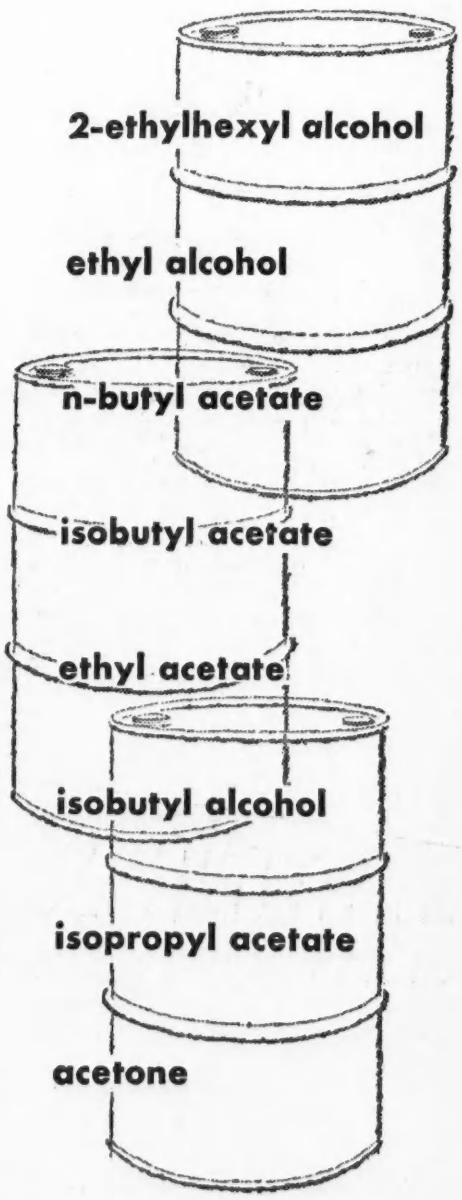
Asphalt, gilsonite, black, jet, bgs., c.l., mines ton 37.00 - —
select, 350°F., fusing pt., bgs., c.l., mines ton 38.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton 37.00 - —
seconds, 300° 390°F fusing pt., bgs., c.l., mines ton 32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼ - —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 - —
emulsion, tanks, tankwagon, refy gal. .09½ - .10
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton 21.00 - —
85-300 penetration, tanks, tankwagon, refy ton 20.00 - —
Aspirin (see Acid, acetylsalicylic).
Atropine, USP, bots oz. 7.00 - —
Sulfate, USP, bots oz. 4.00 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root, bark, bags lb. .28 - .30
Barbital, USP, 100-lb. dms lb. 4.50 - —
Sodium, USP, dms lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton 92.50 - —
smaller lots works ton 102.50 - —
Chlorate kgs., works lb .32 - .36
Chloride, anhyd., bgs., c.l., works. ton 158.00 - —
l.c.l. works ton 168.00 - —
tech., cryst., dms., c.l., works. 100 lbs. 6.00 - —
l.c.l., works 100 lbs. 6.50 - —
NF, cryst., dms lb. .18 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see barium peroxide).
Hydrate, cryst., bgs ton 180.00 - 190.00
Monoxide (see Oxide).
Nitrate, bbls., c.l., works lb. .12½ - —
l.c.l., works lb. .14 - —
Oxide grd., dms., c.l., frt. equald. ton 255.00 - —
l.c.l., works ton 265.00 - —
Peroxide, dms., works lb. .16 - —
Stearate, cns., c.l., frt. alld lb. .37 - —
l.c.l., same basis lb. .38 - .42
Sulfate, tech. (see Barytes and Blanc fixe).
X-ray, dms lb .14 - .14½
Sulfide, dms., c.l., works ton 85.00 - —
l.c.l., works ton 95.00 - —
Barytes, Southern off-color, bgs., mines ton 25.00 - —
95.75%, bgs., mines ton 25.00 - —
water-grd., paper bgs., c.l., E. St. Louis ton 41.60 - —
ex-whse., N. Y. ton 60.10 - —
Bauxite, bulk, mines ton 9.50 - 10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls lb. .35 - .37
root, bls lb. .45 - .50
Bentonite, dom., 200 mesh bgs., c.l., mines ton 14.00 - —
imp., Italian, white, high gel., bgs., 5-ton lots, ex whse. ton 80.60 - —
1 ton-lots, ex whse ton 83.10 - —
low gel, bgs., 5 ton-lots, ex whse. ton 78.95 - —
1 ton-lots, ex whse ton 81.45 - —
Benzal chloride, cbys., works lb. .22 - .23½
Benzaldehyde, NF, dms lb. .74 - 1.05
tech., cbys., dms lb. .44 - —
Benzene (see Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., bgs., dms., c.l., works, gamma unit-lb. .0075 - .009
l.c.l., works, gamma unit-lb. .015 - —
wet dust, distributors, dms., c.l., dlvd., gamma unit-lb. .02 - —
l.c.l., dlvd., gamma unit-lb. .021 - —
Benzidine hydrochloride, bbls., frt. alld., 100% basis lb. 1.00 - —
Benzocaine, dms lb. 3.48 - 3.50
Benzol, pure or nitration, tanks, works
Bethlehem, Pa. gal. .36 - —
Birmingham district gal. .36 - —
Chicago district gal. .36 - —
Cleveland district gal. .36 - —
Geneva, Utah gal. .36 - —
Johnstown, Pa. gal. .36 - —
Lone Star, Texas gal. .36 - —
Lorain, Ohio gal. .36 - —
Minnequa, Colo gal. .35 - —
Philadelphia district gal. .36 - —
Pittsburgh district gal. .36 - —
Sparrows Point, Md. gal. .36 - —
Syracuse, N. Y. gal. .36 - —
Terre Haute, Ind. gal. .36 - —
Youngstown, Ohio gal. .36 - —
Benzophenone dms lb. 1.40 - 1.70
Benzotrichloride, cbys., frt. equald. lb. .18 - .20
Benzoyl chloride, cbys., dms., c.l., works, frt. equald. lb. .22 - —
l.c.l., same basis lb. .23 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
Peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c., cns., dms. lb. .62 - 1.10
Chloride, tech., cbys., dms., c.l., works, frt. equald. lb. .23 - —
l.c.l., same basis lb. .24 - —
tank trucks, same basis lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.

Cinnamate, cns. lb. 3.35 - 3.90
Formate, cns. lb 1.30 - 2.10
Isoeugenol, cns. lb. 8.60 - 9.10
Propionate, bots. lb. 1.35 - 1.65
Salicylate, bots. lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns. lb. 35.00 - 36.25
Hydrochloride, bots lb. 35.00 - 36.25
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).



Eastman
solvents

These products are stored in bulk in the major industrial centers of the United States. For further information, write or call your nearest Eastman representative.

Eastman
CHEMICAL PRODUCTS, INC.
Kingsport, Tennessee
subsidiary of EASTMAN KODAK COMPANY

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tenn.; New York—260 Madison Ave.; Framingham, Mass.—65 Concord St.; Cincinnati—Carew Tower; Cleveland—Terminal Tower Bldg.; Chicago—360 Michigan Ave.; Houston—412 Main St.; St. Louis—Continental Bldg. **West Coast: Wilson Meyer Co.,** San Francisco—333 Montgomery St.; Los Angeles—4800 District Blvd.; Portland—520 S. W. Sixth Ave.; Salt Lake City—73 S. Main St.; Seattle—821 Second Ave.

BHC (see Benzene hexachloride, technical).
Biotin cryst., bots ..... gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars ..... lb. 5.11 - —
Hydroxide, dms. ..... lb. 4.65 - —
Metal, bxs., ton lots ..... lb. 2.25 - —
Nitrate, cryst., dms ..... lb. 2.10 - 2.17
Oxide, anhyd., dms ..... lb. 4.47 - 5.05
Oxychloride, dms ..... lb. 4.37 - 4.42
Phenolsulfonate, fib. dms ..... lb 5.22 - —
Subcarbonate, USP, dms ..... lb. 3.20 - —
Subgallate, NF, fib. dms ..... lb 3.15 - —
Subiodide, fib. dms. ..... lb. 5.37 - —
Subnitrate, NF, dms ..... lb 2.65 - —
Subsalicylate, USP, dms ..... lb 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Black, acetylene, bgs., c.l., works. lb. .17 - —
cs., l.c.l., shipt. point ..... lb. .22½- .26
Ash (see Barium sulfide).
Bone dms. l.c.l., frt. alld .. lb. .17 - .23¼
Pacific coast bone black prices, 2c. per lb higher
Carbon, channel, pigment, high color, beads ctns., c.l., works. lb. .72 - —
l.c.l., dlvd. or whse. lb. .78 - —
medium color, uncompressed, bgs., c.l., works. lb. .12 - —
l.c.l., dlvd. or whse. lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs. c.l., works ..... lb. .074 - —
l.c.l., works ..... lb. .1225- —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works. lb. .0750- —
bgs., c.l., works ..... lb. .0790- —
l.c.l., dlvd. or whse lb. .122 - .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns., l.c.l., whse ..... lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs. cns., l.c.l., whse .. lb. .065 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs. c.l., works. lb. .12¾- —
l.c.l., works ..... lb. .13 - —
Lamp, bgs., c.l., works ..... lb. .16 - .45
Mineral, bgs., works ..... lb. .0160- .067½
Blackberry root bark, bls ..... lb. .45 - —
Black haw root bark, bls ..... lb. .65 - .70
tree bark, bls ..... lb. .40 - .45
Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 - —
l.c.l., works ton 200.00 - —
direct process, bgs., c.l., works. ton 100.00 - —
l.c.l., works ..... ton 110.00 - —
N. Y whse ..... ton 140.88 -165.00
Bleaching powder, dms., c.l., works. 100 lbs. 5.02 - —
l.c.l., works ..... 100 lbs. 6.52 - —
blood, dried, 16-16½% ammonia, bgs. unit-ton. 6.50 - —
high-grade unground, 16-17% ammonia, bgs., Chicago. unit-ton. 7.00 - —
soluble, bgs., c.l. ..... lb. .15 - .16½
l.c.l. ..... lb. .17½- .22½
Bloodroot bls. ..... lb. .48 - .50
Blue alkali, dry bbls., dlvd. N. or Tenn. and N C., E of Miss R. including St Paul Minneapolis, Davenport Rock Island, St Louis (b 2.00 - —
toner bbls. (the flushed same basis lb. 1.15 - —
Chinese, bbls., same basis lb. .49 - —
Cobalt, genuine, bbls., same basis lb. 4.90 - —
Imitation (see Blue ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese, Milori, Potash, Prussian and Soda)
Methyl violet toner, molybdated, PMA, bbls., same basis lb. 2.60 - —
tungstated, PTMA, bbls., same basis lb. 3.85 - —
Milori, bbls., same basis ..... lb. .49 - —
Peacock, fugitive, 100% color strength, bbls., same basis lb. .75 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls. same basis lb. .56 - —
Prussian, insoluble, bbls., same basis lb. .49 - —
soluble, bbls., same basis .... lb. .49 - —
Soda, CP, bronze, bbls., same basis lb. .56 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½- .35
jobbing types, bbls., same basis, lb. .16½- .18½
reg. types, dry, bbls., same basis, lb. .22½- .35
Victoria toner, molybdated, PMA, bbls lb 4.10 - —
tungstated, PTMA, bbls ... lb. 5.00 - —
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.). Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E ... ton 70.00 - —
Los Angeles ..... ton 82.00 - —
Bone phosphate defluorinated (see D)
of lime (see Calcium phosphate, tribasic).
precipatated (see Calcium phosphate tribasic, NF, precip.).
Borax, tech., anhyd., bgs., c.l., works. ton 78.00 - —
ton lots ex whse. N. Y or Chicago .. ton 125.75 - —
bulk, c.l., works ..... ton 70.00 - —
cryst. 99½%, bgs., c.l., works. ton 67.25 - —
ton lots, ex-whse., N. Y. or Chi ton 115.00 - —
smaller lots, same basis. ton 120.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 41.25 - —
ton lots, ex whse., N. Y., Chi ton 89.00 - —
smaller lots, same basis. ton 94.00 - —
bulk, c.l., works ..... ton 35.75 - —
pentahydrate, 99½%, bgs., c.l., works ton 55.50 - —
ton lots, ex whse., N.Y., Chi ton 108.25 - —
smaller lots, same basis. ton 103.25 - —
powd., 99½%, bgs. ..... ton 46.25 - —
ton lots, ex-whse., N. Y or Chi. ton 94 00 - —
smaller lots, same basis. ton 99.10 - —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt alld. or nearest whse. pt lb. .18 - .24
l.c.l. same basis ..... lb. .19 - .26
Borneol, cns. ..... lb. 2.50 - 4.50
Borontrifluoride gas, cyls., truckload, works lb. .62 - —
ters truckload, works lb. 70 - —
Brazilwood extract (see Hypernic extract)
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
l.c.l., same basis ..... lb. .33 - .38
ret. dms., c.l., t.l., same basis. lb. .30 - —
l.c.l., same basis ..... lb. .30 - .32
tanks, same basis ..... lb. .21½- —
Bromoform, pharmaceutical grade, bots lb 1.62 - 2.60
cbys. ..... lb. 1.52 - —
Bromstyrol, bots ..... lb. 5.40 - 5.70
Bronze powder aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works lb. .13¾- —
l.c.l., works ..... lb. .14 - —
Oxide, metallic, bgs. works .. lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .04¼- 15½
l.c.l., works ..... lb. .04½- 15½
raw, paper ogs. c.l. works lb. .04½ 13
l.c.l. works ..... lb. .04¾ 13¼
Umber, burnt, American, bgs., c.l., works lb. .06 - —
l.c.l., works ..... lb. .06¼- .07
Turkey type bgs. c.l. Boston, Bethlehem Easton Pa., Hiwassee, Va., N. Y .. lb. .06¾- —
l.c.l., works ..... lb. .07 - —
raw, American bgs. works lb. .06¼ 06½
Turkey-type bgs., works lb. .06¾ .07
Vandyke bbls., works ..... lb. .09½ .12

Brucine, cns., 100-oz. lots ..... oz. .20 - .25
Sulfate, NF, cns., 100 oz. lots oz. .15 - .20
Buchu leaves, bls lb. .50 - —
Butadiene refd., cyls., refy ... lb. .22 - —
tanks, refy ..... lb. .15 - —
Butane, indust., tanks, group 3 gal. .03½- —
N. Y. harbor ..... gal. .08 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .15 - —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
n-synthetic, dms., c.l., dlvd. E lb. .15 - —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
sec-synthetic, dms., c.l. dlvd E. lb. .12½- —
l.c.l., same basis ..... lb. .13¼- —
tanks, same basis ..... lb. .10¾- —
Alcohol (see Alcohol n-Butyl).
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works ..... lb. .37½- —
c.l. works ..... lb. .38 —
n-Ether, dms., c.l. works ..... lb. .31½- —
l.c.l., works ..... lb. .32 - —
tanks, works ..... lb. .30 - —
Lactate dms., c.l. frt. alld. E. of Rockies lb. .35 - —
l.c.l., same basis ..... lb. .36 - —
tanks, same basis ..... lb. .33 - —
Laurate, dms., works ..... lb. .39 - —
Methacrylate normal, dms., less truckloads works lb. 70 - —
Oleate, refd., dms., l.c.l., works lb. .32 - —
Phenylacetate dms lb 4.50 - 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms, l.c.l., frt equald lb. .24 - .27

BHC—Calcium p-Aminosalicylate

6-tert-Butyl-m-cresol, dms., c.l., works lb. .49 - —
l.c.l., works ..... lb. .50 - —
tanks, works ..... lb. .48 - —
p-tert-Butylphenol, bgs., c.l., works. lb. .25½- —
l.c.l., works ..... lb. .26½- —
Butyraldehyde, dms., c.l., dlvd lb. .21½- —
l.c.l. dlvd ..... lb. .22½- —
tanks, dlvd ..... lb. .19½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter)
Cadmium iodide, 25-lb. fib. dms lb 6.75 - 7.05
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.35 - —
hydrous, dms ..... lb. 3.15 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.35 - —
hydrous, 100-lb. lots or more, lb. 3.15 - —
citrated, USP, dms., 100-lb. lots or more lb. 2.90 - —
Calamine, USP, dms ..... lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .75 - —
25 to 100 gram lots, works. gram. .80 - .90
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted lb. 7.00 - —
smaller lots, same basis ... lb. 7.05 - 7.50

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Latex-base paints can have

desired covering power, good color, washability, and FLAME RESISTANCE!

FR-28 puts SAFETY FROM FIRE into paints having good scrub-resistance! This new sodium borate product—FR-28—has been specifically developed for use as an additive for your latex-base paint composition to produce a coating that is actually flame resistant. Such paints are easily mixed with simple equipment for application with all conventional sprays . . . and they do resist fire! Look at this test panel for proof!

FR-28

FR-28 is a readily soluble sodium borate powder containing approximately 66% B_2O_3 (boron trioxide) which is compatible with numerous latices now being offered by various manufacturers. FR-28 is rated as Class C (slow burning) according to the interpretation of Fed. Spec. SS-A-118a and revised SS-A-118b. FR-28 is part of a basic paint formula developed and thoroughly tested in our research laboratory. Write today for Service Bulletin 6-F to get the formula and Bulletin FR-28 for technical information; address . . . 100 Park Ave., New York 17, New York.

Wall board coated with paint containing FR-28 showed this superior flame resistance . . . readily met Fed. Spec. SS-A-118a and SS-A-118b when tested by a nationally known laboratory.

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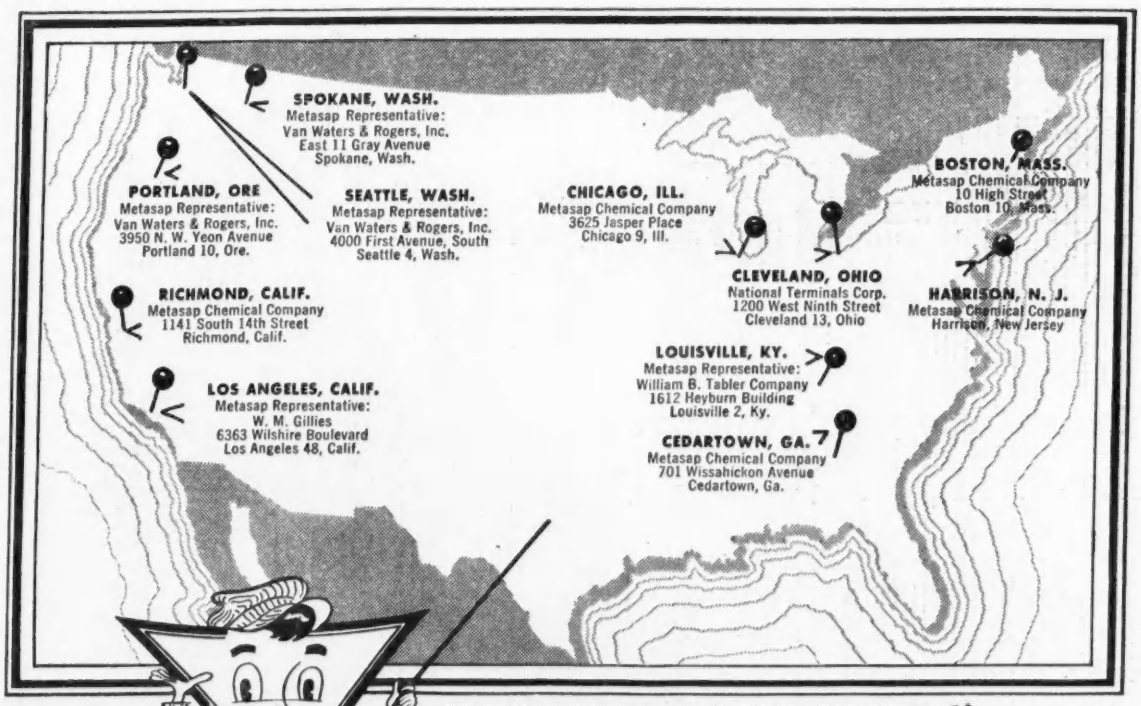
Calcium, Arsenate—p-Chloroaniline

Calcium arsenate, dealers, dms., c.l., whse. works, frt alld on 96 lbs or over	lb	.09	.10
l.c.l., same basis	lb.	.10	—
Bromide, NF, jars	lb.	.90	.97
Carbide standard generator size, dms. c.l. dlvd to	ton	34.40	—
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works	ton.	7.50	10.00
chalk, whiting, 325 mesh, bgs. works	ton	22.00	34.00
water-grd., ½ to 0 microns, bgs. c.l. works	ton	30.00	—
10 to 20 microns, bgs., c.l., works	ton	17.00	18.00
precip., dense, bgs. c.l., works.	ton.	30.00	33.00
l.c.l., works	ton	40.00	48.00
medium, bgs., c.l., works	ton	35.00	—
l.c.l. works	ton	45.00	50.00
surface treated, bgs., c.l., works	ton	45.00	50.00
l.c.l. works	ton	45.00	65.00
ultrafine, bgs., c.l., works.	ton	110.00	160.00
l.c.l., works	ton	120.00	175.00
Chloride, cryst., purif., dms	lb.	.27	—
flake, 77-80%, paper bgs., c.l., works, frt. equald	ton	27.00	—
liquor 40%, tanks, frt. equald,	ton.	11.35	—
pellets, bgs., c.l., works	ton	33.00	—
powd. bgs., c.l., works	ton.	37.65	—
solid, 73-75% dms., c.l., frt equald	ton	25.50	—
l.c.l. works same basis	ton	34.00	71.00
USP, gran. dms	lb.	.40	—
Chromate bgs. frt equald	lb	29½	30
Cyanide, dms., dlvd. E. of Rockies	lb.	.24	.50
Gluconate, AA, bbls., dms	lb.	.70	.72
USP, bbls., dms	lb.	.33	.65
Glycerophosphate, NF, fib. dms.	lb.	2.30	2.45
Hydride, dms., works	lb.	2.15	3.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E. of Rockies	cs.	22.60	24.75
dms., 100-lb., same basis	dm.	28.65	32.50
Hypophosphite, dms., ton lots or less	lb.	.90	.93
Iodide, jars	lb.	4.52	—
Lactate, USP, dms., 10,000-lb. lots or more, works	lb.	.40	—
smaller lots, works	lb	.41	.48
Mandelate, USP, dms., works	lb.	2.10	2.25
Naphthenate, liq., 4% Ca, cms., frt. equald	lb.	.27¼	—
Nitrate, fertilizer grade, bgs., c.l., Los Angeles	ton.	46.00	—
tech., dms., works	lb.	.13	—
d-Pantothenate, jars, 100-gram lots or more, frt. adjusted.	gram	.07½	—
Para-aminosalicylate (see Calcium p-Aminosalicylate).			
Phenolsulfonate, dms	cs.	.70	—
Phosphate, dibasic, USP, bgs., c.l.,	100 lbs	7.10	—
l.c.l.	100 lbs	7.60	7.95
feed grade, 18½ to 21 units, bgs., c.l., frt. equald.	ton.	74.00	84.00
l.c.l., bgs., frt. equald.	ton.	85.00	95.00
monobasic, bgs., 10,000-lb. lots, frt. equald	100 lbs.	6.05	—
smaller lots, same basis.	100 lbs.	6.55	—
tribasic, precip., NF, bgs., c.l., frt. equald.	100 lbs.	7.60	—
l.c.l., frt. equald	100 lbs.	7.95	—
Calcium phytate, bgs., works	lb.	.37	—
Resinate, precip., dms., frt. alld., works	lb.	.30	—
Silicate, hydrated, bgs., c.l., works.	lb.	.06	—
l.c.l., works	lb.	.06½	—
paint grade (see Wollastonite).			
Stearate, ctns., c.l.	lb.	.35	—
l.c.l.	lb.	.36	.40
Sulfate (see Gypsum).			
Calomel, USP, powd., dms	lb.	5.42	—
Camphene 46° m.p., dms., incl., c.l., works	lb.	.128	—
l.c.l., same basis	lb.	.143	—
tanks, same basis	lb.	.103	—
Chlorinated, 67-69% (see Toxaphene).			
Camphor monobromated, NF, dms.,	kgs	lb. 3.00	3.12
nat., USP, powd., cs., 100-lb. lots.	lb.	.60	.65
tablets, 1-oz., ½-oz. cs	lb.	.75	.80
syn., tech., 1 bbl. or more	lb.	.52	—
USP, gran., powd., bbls, 2,000-lb. lots	lb.	.59	—
1,000-lb. lots	lb.	.60	—
smaller lots	lb.	.61	—
Syn., USP, tablets, tins, 2,000-lb. lots	lb.	.90	—
1,000-lb. lots	lb.	.91	—
smaller lots	lb.	.92	—
Canada balsam (see Fir balsam).			
Cantharides, Chinese, cs	lb	2.00	2.05
powd., bxs.	lb	2.25	2.30
Russian, bgs.	lb	4.00	4.05
powd. bxs.	lb	4.35	4.40
Capsicum (see Pepper red).			
Oleoresin NF from domestic pepper, dms	lb.	4.50	5.25
from African pepper, dms	lb.	4.35	5.00
Caraway seed, Dutch, bgs	lb.	.20½	.21
Carbazole, 97%, bbls., ton lots, works	lb	1.05	—
Carbinol, methyl isobutyl (see Methyl isobutyl-carbinol).			
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area.	ton.	73.00	115.00
cyls., same basis	lb.	.08	—
solid, same basis	lb.	.035	.040
Disulfide, 55-gal. dms., c.l., works, frt. alld. to competitive points	lb,	.0750-	—
l.c.l., same basis	lb.	.0850-	—
5-gal. dms., c.l., same basis	lb.	.1025-	—
l.c.l., same basis	lb.	.1125-	—
tanks, same basis	lb.	.0515-	.0525
Tetrachloride, CP, dms., frt. alld.	lb.	.10½	.12¼
tech., consumers, dms., c.l., E. Rockies, frt. alld	lb.	.10	—
W. of Rockies, f.o.b., stock-points	lb.	.10½	—
l.c.l., E. of Rockies, frt. alld.	alld	lb.	.11¾	—
W. of Rockies, f.o.b. stock-points	lb.	.12¼	—
tanks, E. of Rockies, frt alld.	lb.	.085	—
W. of Rockies, f.o.b. stockpoints	lb.	.09	—
Carboxymethyl cellulose (see CMC).			
Carbromal, NF, dms. 100-lb lots, works	lb	4.00	4.25
smaller lots, works	lb	4.10	4.75
Cardamom fruit, fancy, bold, cs	lb.	3.90	—
AA, cs.	lb.	3.60	—
decorticated, Alleppey, cs	lb.	1.90	—
Guatemalan, cs.	lb.	1.75	—
green, Alleppey, bgs	lb.	1.90	—
Ceylon, bgs.	lb.	1.90	—
seed (see Cardamom fruit decorticated).			
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd	lb.	7.80	—
smaller lots, dlvd.	lb.	7.95	8.45
Carotene, tech., 1,350,000 A units per gram, tins, works	gram.	.55	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units.		.18	—
microcrystalline in oil, 400,000 A units per gram, tins, works	million units.	.33	—
Carvol, bots.	lb	4.75	9.65
Cascara sagrada bark, bulk	lb.	.30	.31
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point	lb.	.27	.30
premium, bgs., 10,000-lb. lots or more, shipt. point	lb	.35	.40
imp., Argentine, acid-precip., grd., 100-lb. lots or more, duty paid	lb.	.22¼	.22½
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J	lb.	.22	—
ton lots, same basis	lb.	.23	—
dm. lots, same basis	lb	.25	—
Cassia, Batavia, cuttings, bls	lb.	.16½	.16¾
longstick, cracked, bls	lb.	.18½	.19
shortstick, cracked, bls	lb.	.17½	.17¾
Saigon, broken, bl's	lb.	No prices.	
medium, reconditioned, bls	lb.	No prices.	
thin, bls	lb.	No prices.	
Castor beans, bgs., f.o.b. Brazilian ports	long ton.	104.00	—
Oil (see Oil, castor).			
Pomace, bgs., c.l., works	ton.	37.50	Nom.
Castoreum, nat., cns	lb.	5.00	30.00
syn., cns	lb.	9.00	—
Catechol, CP, cryst., fib. dms., works	lb	2.17½	—
resub., dms., works	lb.	4.29½	—
Catnip leaves, Southern, bls	lb.	.75	—
Celery seed, French, bgs., shipt	lb.	.46	.50
Indian, bgs.	lb.	.14½	.15
Celluloid scrap (see Pyroxylin scrap).			
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E	lb.	.35	.46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545	.555
27% butyryl content, bgs., dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb.	.545	.555
50% butyryl content, bgs., dlvd. E	lb.	.585	.595
half-second, bgs., dlvd. E	lb.	.545	.555
Cerium hydrate, 74% CeO_2, bgs. ctns., 100-lb lots or more	lb.	1.44	—
77% CeO_2, fib dms. 100-lb lots or more	lb	1.74	—
Oxalate, NF, bbls. bgs., works	lb	1.05	—
Oxide, optical grade, bgs. 50-lb lots or more, works	lb	1.85	1.98
smaller lots works	lb.	2.03	2.23
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian style, cs	lb.	.75	.80
Roman cs	lb	1.00	1.15
Charcoal, activated, NF, fib. dms., c.l., works	lb.	.25	.32
5-ton lots, works	lb.	.26½	.32¼
smaller lots works	lb.	.27	.50
Bone (see Black, bone).			
Hardwood, briquets, bgs., c.l., works	ton.	77.00	88.00
gran., bgs., works	ton.	77.00	—
bulk c.l., works	ton	70.40	—
Pinewood gran., powd., bgs., c.l., works, South	ton.	55.00	—
l.c.l., works, South	ton.	55.00	65.00
lump bgs., c.l., works, South	ton.	51.50	—
l.c.l., works, South	ton.	54.50	69.00
bulk, c.l., works, South	ton.	36.00	—
Chestnut extract, liq., 25% tannin, bbls., c.l., works	lb.	.04¾	—
l.c.l., works	lb.	.0510-	—
tanks, works	lb.	.04	—
powd., 60% tannin, bgs., extra, c.l., works	lb.	.1032-	—
l.c.l., works	lb.	.1102-	—
Chloral, tech., 94% min., dms., c.l. works	lb.	.23	—
l.c.l., works	lb.	.24	—
tanks, works	lb.	.21	—
Hydrate, USP, 40-lb. jars, 1,000-lb. lots	lb.	1.00	—
500-lb. lots	lb.	1.03	—
100-lb. lots or less	lb.	1.05	—
Chlordan, agricultural, cs., c.l., frt alld	lb.	.65	—
l.c.l., 5,000 to 10,000 lb. lots, frt alld	lb.	.66	—
clarif., dms., c.l., frt. alld	lb.	.75	—
l.c.l., 5,000 to 10,000 lb. lots, frt. alld	lb.	.76	—
Chloramine T, NF, bbls., works	lb.	.75	1.00
Chlorinated paraffin, 42% dms., c.l., frt. alld	lb.	15½	—
l.c.l., same basis	lb.	.16½	—
70%, dms., c.l., same basis	lb.	.18	—
l.c.l., same basis	lb.	.19	—
Rubber, 5, 10, 20 cps., ctns., c.l., works	lb.	.55	—
l.c.l., works	lb.	.56	—
125, 1,000 cps. ctns., c.l., works	lb.	.65	—
l.c.l., works	lb.	.66	—
Chlorine, liq., cyls., c.l., works, frt. equald	lb.	.09½	—
l.c.l., Metropolitan area	lb.	.11	.12¼
tanks, single units, works, frt. equald 100 lbs.		2.93	—
multiple units, 5 cars, works, frt. equald 100 lbs.		3.80	3.83
3 cars, same basis 100 lbs.		3.80	—
2 cars, same basis 100 lbs.		5.00	—
1 car, same basis 100 lbs.		6.00	—
4-Chloro-2-aminotoluene, fused, bbls.	lb.	1.45	—
m-Chloroaniline, dms., c.l., frt. equald	lb.	.75	—
l.c.l., same basis	lb.	.80	—
o-Chloroaniline, dms., c.l., works, frt. equald	lb.	.70	—
l.c.l., same basis	lb.	.72	—
p-Chloroaniline, dms., c.l., works, frt. equald	lb.	.75	—



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Stearates

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o-Chlorobenzaldehyde, dms., works, lb. 1.20 - —
p-Chlorobenzaldehyde, dms., works, lb. 1.33 - —
Chloroform, tech., dms., c.l., dlvd, E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, 100% basis lb. .81 - —
powd., dlvd. E lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald, lb. .34½- —
l.c.l., same basis lb. .35½- —
p-Chlorophenol, dms., c.l., frt. equald, lb. .34½- —
l.c.l., same basis lb. .35½- —
Chlorophyll, oil soluble, 4%, not fixed, pails, tins, works lb. 4.25 - —
copper fixed 6½% tins, pails, works lb 4.25 - —
Sodium-copper, aqueous soln., 4%, dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.00 - 4.80
14% dms., works lb. 8.90 - —
conc., dom., 50%, dms., works, 100% basis lb.42.00 - —
75%, dms., works, 100% basis lb.45.00 - —
90%-100%, dms., works, 100% basis lb.45.00 - —
imp., 60%, tins, 100% basis, lb.58.00 - —
90%, tins, 100% basis lb.58.00 - —
75%, tins, 100% basis lb.58.00 - —
Chloropicrin, comi., bots lb. 1.50 - —
cyls. 130 lbs frt alld lb .95 - —
100 lbs., same basis lb. .97 - —
25 lbs. same basis lb 1.22 - —
Cholesterol, USP fib. dms., 100-lb. lots lb. 6.85 - 9.00
Choline bitartrate fib dms., frt adjusted lb. 1.25 - 1.50
Chloride fib dms., frt adjusted, lb. 1.50 - 1.75
Dihydrogen citrate, fib dms., frt. adjusted lb. 1.50 - 1.75
Chromium acetate, soln., 7½%, bbls., works lb. .08½- —
chys works lb. 10¼ —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green chromium oxide).
Trioxide NF bots lb. .82 - .89
Yellow, (see Yellow, chrome)
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinchonidine, cryst. cns. 100-oz. lots, oz. .65 - —
Sulfate cns., 100-oz. lots oz. .37 - .40½
Cinchonine cryst. cns., 100-oz. lots, oz. .52 - .57
Sulfate, NF, cns., 100-oz. lots oz. .27½- .30½
Cinchophen NF, heavy density, dms., frt. adjusted lb. 3.70 - 4.05
standard density, dms., same basis lb. 3.50 - 3.85
Cinchophen-sodium, dms., frt. adjusted lb 4.50 - 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Cinnamon, Ceylon, No. 2 lb. .60 - —
"0000," bgs. lb. .86 - —
Citral, bots., cns lb. 6.05 - 6.20
Citronellal, bots., dms lb. 1.85 - 2.50
Citronellol bots., dms lb. 2.70 - 3.25
Civet, artif., bots lb.13.75 -15.00
nat., bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l., Tenn. ton.20.50 - —
imp., airfloated, bgs., c.l., Atl. port long ton.42.00 -45.00
lump, bulk, Atl. port long ton.27.00 -30.20
China, dom., dry-grd., airfloat, 99%, 325 mesh, bgs., c.l., Georgia, works ton.10.00 - —
l.c.l., Georgia, works, ton.15.50 - —
300 mesh, bgs., c.l., Georgia, works ton.13.50 -14.50
l.c.l. ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 —
l.c.l., ex whse net ton.60.00 -65.00
Clove, Madagascar, bgs lb. .53½- —
Zanzibar, bls. lb. .53½- —
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis, lb. .37 - —
less than 23,000 lbs., dlvd. E., 100% basis lb. .41 - —
65%, bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .37 - —
l.c.l., dlvd. E., 100% basis, lb. .41 - —
purif., high vis. (see Gum Cellulose).
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld. lb. .55 - —
smaller lots, same basis lb. .57 - —

CMC prices W. of the Rockies are 2c. per lb. lower, and are on a works basis.

Coaltar, crude, resale dms., c.l., ex-whse gal. .255 - —
l.c.l., ex-whse gal. .275 - —
tanks, ex works gal. .155 - .159
refd., resale, dms., c.l., ex-whse. gal. .2650- .32
l.c.l., ex-whse gal. .2850- .34
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, bbls., dlvd. lb. 1.30 - —
Carbonate, 46% powd., bgs., dlvd. lb. 2.15 - —
Chloride, 24.2% Co., kgs., dlvd., lb. 1.20 - —
Hydrate, 60-61% Co, bbls., dlvd. lb. 2.72 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾- —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liq., 6% Co., dms., dlvd. lb. .48¼- —
Nitrate, 20.1% Co, bbls., dlvd lb. 1.00 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Resinate, fused, 3% Co., dms lb. .29¾- —
Sulfate, cryst. 21% Co., dms., dlvd lb. .89 - —
monohydrated, 33% Co., dms. dlvd. lb. 1.40 - —
Tallate, 6% Co., dms., dlvd lb. .43¾- —
Cocaine, USP, cns., 100-oz. lots oz..17.80 - —
Hydrochloride, cns., 100-oz. lots oz.13.75 - —
Cocillana bark, bgs lb. .40 - .50
Cocoa butter, bgs lb. .82 - .87
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Hydrochloride, cns., 100-oz. lots oz.11.75 -
Phosphate, USP, cns., 100-oz. lots. oz.10.25 - —
Sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz.33.50 -40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .80 - 1.10
Collodion, USP, dms lb. .32½- —
flexible, USP, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. No prices.
Condurango bark, bales lb. .40 - .50
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .40 - —
l.c.l., works lb. .41 - —
Carbonate, 55%, bgs., works lb. .263 - .273
Chloride anhyd., bbls., works lb. .39 - —
cryst., bbls., works lb. .26¼- —
Cyanide, tech., bbls., 20,000 lb. lots or more lb. .609 - —
1,000 lb. lots or more lb. .619 - —
smaller lots lb. .639 - —
Gluconate, cns., dms lb. 3.00 - 3.24
Hydrate, dms., frt. alld. E. Miss lb. .40¼- .40¾
Metal, electrolytic, dlvd., Valley basis lb. .30 - —
Naphthenate, liq., 8% Cu., dms., frt. alld lb. .23½- —
Nitrate, tech., cryst., bbls., works, lb. .33¼- —
Oleate, solid, 9% Cu, dms., works lb. .45 - —
Oxide, black, bbls., works lb. .39 - .44½
red, USN type I, 97%, bbls., works lb. .48½- .58
type II, 90%, bbls., works lb. .41 - .46½
Oxychloride, dms., works lb. .40 - .40½
Quinolinate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld. lb. .30 - —
Sulfate, CP, gran., bbls., works lb. .1715- —
cryst., 99%, bgs., c.l., works, 100 lbs.10.35 - .
l.c.l., works 100 lbs.10.60 -11.35
monohydrated, 35% dms., c.l., works 100 lbs.17.10 -17.85
tribasic, dealers, bgs., c.l., works, frt. alld 100 lbs.22.50 - —
c.l., works 100 lbs.23.00 -24.50
Undecylenate, dms. lb. 2.90 - 3.00
Copperas (see Ferrous sulfate).
Copra, Atl., Gulf ports, c.i.f. ton.175.00 - —
Pacific ports, c.i.f. ton.170.00 - —
Coriander seed, Moroccan, bgs. lb. .10 - .10½
Roumanian, bgs. lb. .07 - .07½
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min. 100 lbs 7.31 - —
l.c.l. 100 lbs. 7.46 - —
Syrup, 42 dms., c.l. 100 lbs 7.32 - —
l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric Chloride).
Cortisone acetate, NNR, bulk gram. 3.50 - 3.55
Cottonseed meal, exp. 41%, sacked, Memphis ton.71.00 -71.50
Coumarin, cryst., NF, dms lb. 3.10 - 3.20
Cramp bark, NF, bls lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. cbys. lb. 3.05 - 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
soln., 80%, tanks, works gal. .2068- —
refd., dms., c.l., works gal. .40 - .42
l.c.l., same basis gal. .50 - .53
tanks, same basis gal. .30 - .33
Wood, beechwood, cbys., dms. lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 - 1.35
pinewood, tanks, works lb. .427 - .438
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms. c.l. frt equald lb. .133 - —
l.c.l. same basis lb. .136 - —
tanks, same basis lb. .12 - —
USP, non-ret. dms., c.l., same basis lb. .143 - —
l.c.l., same basis lb. .146 - —
ret. dms., c.l., same basis lb. .140 - —
l.c.l., same basis lb. .145 - —
tanks, same basis lb. .130 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
l.c.l., works lb. .61 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald lb. .173 - —
l.c.l., same basis lb. .176 - —
tanks, same basis lb. .16 - —
29°C., ret. dms., c.l., frt. equald, lb. .16 - —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald lb. .153 - —
l.c.l., same basis lb. .156 - —
tanks, same basis lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .49 - —
l.c.l., dlvd lb. .51 - —
Methyl ether, cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼- .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
l.c.l., works 100 lbs.14.25 - —
Insecticide, dealers, bgs., c.l., dlvd. 100 lbs.16.75 - —
l.c.l., dlvd 100 lbs.17.75 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .25 - —
l.c.l., works lb. .26 - .26½
Cubeb berries, XX, NF, bgs lb. .50 - —
powd., cs lb. .65 - —
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .12¾- —
Turkish, bgs. lb. .12¾- —
Cutch extract, 50% tannin, bgs., ex dock, duty extra lb. .08½- —
Cyanamide fertilizer mixing grades, 20.6% N, gran., bgs., Niagara Falls, Ont., contract ton.55.00 - —
pulv., 21% N, bgs., works, unit-ton. 2.75 - —

FOR THE CHEMICAL AND GENERAL INDUSTRY

Caffeine—Natural
Caffeine—Synthetic
Cesium Salts
Cocaine and Salts
Coumarin
Theobromine
Theobromine—Sod. Sal.
Theophylline
Vanillin—Eugenol

Lithium Products
Lithium Benzoate
Bromide
Carbonate
Chloride
Citrate
Fluoride
Hydride
Hydroxide
Metal & Metal Alloys
Salicylate
Stearate
Sulphate

Rare Earth Products
Cerium Carbonate
Chloride
Hydrate
Nitrate
Oxide
Rare Earth Carbonate
Chloride
Fluoride
Nitrate
Lanthanum Salts
Neodymium Salts
Thorium Nitrate

Aromatics
Ionones
Methyl Ionones
Isolates
Synthetics

Synthetic Detergents
Maypon 4 C
Maypon K
Maypon M
Maypon OW

FOR THE TEXTILE INDUSTRY

MAYPON K

PROTEIN – FATTY ACID – CONDENSATE

An effective anionic detergent in scouring, bleaching, and dyeing.

A powerful emulsifier for mineral oils.

FOR THE COSMETIC INDUSTRY

MAYPON 4 C

PROTEIN – FATTY ACID – CONDENSATE

Anionic sudsing agent, detergent, and emulsifier in the production of

SHAMPOOS • PERMANENT COLD WAVE SOLUTIONS • LIQUID BATH PREPARATIONS COSMETIC CREAMS

In all concentrations, Maypon 4 C satisfies the Draize Woodward eye irritation test.

MAYWOOD CHEMICAL WORKS
MAYWOOD, NEW JERSEY
ESTABLISHED 1895

MAYPON

Cyanamide, Indust. Grade—Dioctyl Adipate

Cyanamide, indust. grade, bgs., c.l., works ton.75.00 - —
l.c.l. bgs., works ton.96.00 - —
6-16 mesh, dms., c.l., works ton.120.00 - —
l.c.l. dms., works ton.140.00 - —

Cyclohexane, tech., dms., c.l., works. gal. .70 - —
l.c.l., works gal. .72 - —
tanks works ga. .55 - —

Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½- .37¾
l.c.l. works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼

Cyclohexanone, tech., dms., c.l., works lb. .33½- —
l.c.l., works lb. .35 - —
tanks works lb. .32 - —

Cyclohexylamine, dms., c.l., works. lb. .46½- —
l.c.l., works lb. .47½- —
tanks, works lb. .45 - —

Cyclopropane, CP, 2-lb cyls. works. cyl 48.00 - —
8 oz cyls. works cyl.12.00 - —

USP, hospitals, cyls., 40-gal. lots, gal. .38 - —
100 gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

D

2-4-D, tech., dms., c.l., works, frt. equald lb. .41½- —
l.c.l., same basas lb. .46½- .48¼
Butyl ester, dms., c.l., works lb. .43 - —
l.c.l., same basis lb. .48 - .50
Isopropyl ester, dms., c.l., works. lb. .43 - —
l.c.l., works lb. .48 - .50

Dandelion root, bls lb. .35 - .40
DDD, tech., flake, grd., fib, bgs., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib, dms., c.l., same basis lb. .28 - —
smaller lots, same basis lb. .30 - —

1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
l.c.l., dlvd. lb. .43 - —
tanks, dlvd. lb. .38½- —

Deertongue leaves, bls lb. .45 - —

Defluorinated phosphate, 13% P, paper bgs., works ton.49.50 - —
14½% P, paper bgs., works ton.48.00 - —
17% P, paper bgs., works ton.56.00 - —
18% P, paper bgs., works ton.64.35 - —

Degras, common, bbls lb. .10 - .12
neutral, less 2% ffa., bbls lb. .23 - .24
over 2% ffa., bbls lb. .22 - .23

Derris root, 5% rotenone powd., bbls lb. .26 Nom.

d-Desoxyephedrine hydrochloride bots lb.25.00 - —
dl, bots. lb. 6.50 - —

Dextrin, corn, gum, paper bgs., c.l., works 100 lbs. 8.95 - —
l.c.l. 100 lbs 9.10 - —
canary paper bgs. c.l. 100 lbs 8.69 - —
l.c.l 100 lbs 8.84 - —
dark, paper bgs., c.l 100 lbs 8.79 - —
l.c.l 100 lbs 8.94 - —
white, paper bgs., c.l. 100 lbs 8.53 - —
l.c.l. 100 lbs 8.68 - —

Corn dextrin in cotton bgs. 25c. per 100 lbs. higher.

Potato, bgs. lb. .10¼- .11
Dextrose, USP, dms. lb. .17¾- —

Diacetone (see Alcohol, diacetone).
Diacetyl, flavor grade, bots lb. 4.50 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¼- —
l.c.l., works lb. .33¼- —
tanks, works lb. .28¼- —
Di-tert-amyl phenol, dms., c.l., works lb. .30¼- —
l.c.l., works lb. .33¼- —
tanks, works lb. .28¼- —
o-Dianisidine fib, dms lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
l.c.l., same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd, E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .68 - —
l.c.l., works lb. .68½- .69
tanks, works, dlvd lb. .66 - .66½
Tartrate, dms., works, frt. alld lb. .64 - .71
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Di-tert-butyl-p-cresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., works lb. .30½- .31½
l.c.l., same basis lb. .31½- .32½
tanks, same basis lb. .29½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline dms., works lb. .75 - .83
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —

p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .16½- —
l.c.l., same basis lb. .19 - —
Dichlorodiphenyltrichloroethane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l., works lb. .05¾- —
tanks, works lb. .04¼- —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works lb. .51¾- —
tanks, works lb. .49¾- —
Dicyclohexyl phthalate, 6lb. dms., c.l., frt. alld., works lb. .58¼- .59
l.c.l., same basis lb. .59¼- .60
Dieldrin, dms., frt. alld lb. 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .26¼- —
l.c.l., same basis lb. .27¼- —
tanks, same basis lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd lb. .67½- —
l.c.l., dlvd lb. .68½- —
tanks, dlvd lb. .65½- —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l., same basis lb. .43 - —
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l., dlvd. lb. .28 - —
tanks, dlvd. lb. .25 - —
Sulfate, dms., c.l., works lb. .18¾- —
l.c.l. works lb. .19¼ —
tanks works lb. .17 —
Diethylamine, dms., c.l., dlvd. E lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .46½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E. lb. .16½- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14¾- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., c.l., works. lb. .46½- —
l.c.l., works lb. .47 - —
Monobutyl ether, dms., c.l., works lb. .23¾- —
l.c.l., works lb. .29¼- —
tanks, works lb. .27 - —
Acetate, dms., c.l., works lb. .30 - —
l.c.l., works lb. .30½- —
tanks, dlvd. E lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd. lb. .20¾- —
l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .19½- —
Acetate, dms., c.l., works lb. .26¾- —
l.c.l., works lb. .27¼- —
tanks, dlvd. E lb. .25¼- —
Monomethyl ether, dms., c.l., works lb. .20 - —
l.c.l., works lb. .21 - —
tanks, works lb. .18½- —
Diethylenetriamine dms., c.l., dlvd E. lb. .43 - —
l.c.l., same basis lb. .44 - —
tanks, same basis lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo.100.00 - —
1-kilo lot kilo.110.00 - —
Digitalis leaves, USP, dom., dms., lb. .90 - 1.10
Digitoxin, USP, bots gram. 5.00 - 5.50
Diglycol laurate, dms lb. .35 - .38
Oleate, dms lb. .31 - —
Stearate, dms lb. .26 - .27
Dihexyl sebacate, dms., c.l., works lb. .64 - —
l.c.l., works lb. .64½- .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works, lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .17 - —
Sulfate, bulk gram. .17 - —
2,2-Dihydroxy-5,5'-dichloro-diphenyl-methane, pure, dms lb. 2.80 - 3.00
tech., dms lb. 1.04 - 1.14
Di-isobutyl ketone, dms., c.l., dlvd. lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, same basis lb. .13½- —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l. same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., works lb. .10 - —
l.c.l., works lb. .11 - —
tanks, works lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd. lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30½- —
Sebacate, dms., c.l., works, lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .48 - —
Dillseed, dewniskered, bgs. lb. .13 - —
nat., bgs. lb. .12 - —
Dimethyl anthranilate, cns lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd. lb. 1.43 - —
l.c.l., dlvd lb. 1.45 - —
tanks, dlvd lb. 1.40 - —
70%, dms., c.l., dlvd., 100% basis lb. .68 - —
tanks, dlvd., 100% basis lb. .66 - —
Hydroquinone, dms lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½- —
lb. .29½- —
l.c.l., works lb. .30½- —
tanks, dlvd. lb. .27½- —
Sebacate, dms., c.l., works lb. 1.27 - —
l.c.l., works lb. 1.28 - —
tanks, works lb. 1.25 - —
Sulfate, 55-gal., ret. dms., c.l., works lb. .15 - —
l.c.l. works lb .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16½- —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln., dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29½- —
l.c.l., frt. alld lb. .30½- —
tanks, frt. alld lb. .28½- —
N,N-Dimethylformamide dms., works. lb. .34 - .39
tanks, works lb. .33 - —
2,4-Dinitroaniline, dms., frt. equaid lb. .57 - —
m-Dinitrobenzene, 85°C., dms lb. .20 - —
89°C., dms lb. .22 - —
2,4-Dinitrochlorobenzene, dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld. E lb. .15¾- —
tanks, frt. alld., E lb. .15 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily, dms. lb. .10 - —
refd., 68°C., dms. lb. .21 - —
Dioctyl adipate, dms., c.l., works. lb. .44½- —
l.c.l., works lb. .45½- —
tanks, works lb. .42½- —

THE VERSENES "Versene" is the registered trade mark of certain synthetically prepared polyamino acids and their salts. As products of modern chelate chemistry, they form soluble, non-ionic chelates with polyvalent metallic ions and completely change their properties so that they can no longer react with other materials and be precipitated from solution by common precipitating agents.

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VERSENE REGULAR (The original Versene) inactivates all metallic ions but is not especially effective for chelating iron in *alkaline* solutions, yet it is the best iron chelating agent for use in *acidic* solutions.(liquid or powder).

VERSEN-OL is the trisodium salt of N-hydroxyethylethylene diamine triacetic acid*. It is a very effective agent for chelating trivalent iron from pH7 to pH10. It forms strong 1:1 ferric chelates. After chelating the iron it will then chelate other heavy metal or alkaline earth ions.(liquid or powder).

VERSENE Fe_3 SPECIFIC is the most powerful complexing agent known for *iron* in the alkaline pH range. It also chelates copper, nickel, cobalt and zinc (47% solution).

VERSENE Fe_3 is a combination of VERSENE and VERSENE Fe_3 SPECIFIC. It complexes both iron and other metallic ions.(liquid or powder).

VERSENE-T complexes ferric and divalent metal ions including hard water salts in *any* caustic solution (55.5% solution).

VERSENE-9. This is the trisodium salt of EDTA. It has a pH of 9.3 in solution at 1% concentration. 1 gram complexes a minimum of 242 mgms. of $CaCO_3$. Its general chemical reaction is identical to Versene Regular.

VERSENE IRON CHELATE is an agricultural Versene to correct iron deficiency and cure chlorosis in citrus and other green growth occurring in *acid* soils. It is the disodium iron chelate of EDTA absorbed into inert vermiculite for convenience in application (50 lb. bags).

VERSEN-OL IRON CHELATE for agriculture is the monosodium iron complex of Versen-OL. It contains 19% min. of iron chelate calculated as NaFe EEDTA*, (4.29% Fe as Fe_2O_3). Balance inert. Cures iron deficiency in plants growing in *any* soil (50 lb. bags).

DISODIUM VERSENATE DIHYDRATE (dry powder) an Analytical Reagent grade of Versene Regular for research and analytical purposes.

VERSENATE INDICATOR (alcohol solution). Color indicator for Versenate method of water analysis.

CALCIUM DISODIUM VERSENATE (25% solution). Chemically Pure grade material for use as stabilizers in drugs, vitamins, pharmaceuticals.

LEAD DISODIUM VERSENATE (34% solution). Preformed complex for use in vinyl plastic emulsions.

The Versenes give you mole-for-mole control over cations in solution. They are made only by Versenes Incorporated under processes originated, developed and patented by Versenes Incorporated. Quality-control over manufacture is so high that uniform complexing power is guaranteed.

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*PATENT PENDING

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Independent Chemical Corp., One Hanson Place, Brooklyn 17, New York
George Mann & Co., Inc., 231 Fox Point Boulevard, Providence, R. I.
Barada & Page, Inc., Houston, Dallas, Corpus Christi, New Orleans, St. Louis, Wichita, Oklahoma City, Tulsa, Kansas City, Mo.
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EUROPEAN MANUFACTURING AGENT: REXOLINFABRIKEN AKTIE BOLAG, HELSINGBORG, SWEDEN.

Dioctyl phthalate, dms., c.l., frt. alld	lb.	.32½	-	—
l.c.l., frt. alld	lb.	.33½	-	—
tanks, frt. alld	lb.	.30½	-	—
Sebacate, dms., c.l., works	lb.	.63	-	—
l.c.l., works	lb.	.63½	-	.64
tanks, works, dlvd	lb.	.61	-	.61½
Di-o-tolyguanidine, dms., ton lots, dlvd.	lb.	.57	-	—
smaller lots, dlvd	lb.	.58	-	—
1,4-Dioxane, dms., c.l., works	lb.	.28¾	-	—
l.c.l. same basis	lb	.29¼	-	—
tanks same basis	lb.	.27	-	—
Dip oil (see Tar acid oil).				
Dipentaerythritol, bgs., l.c.l., works		.35	-	—
Dipentene, dest-dist., dms., c.l., works	gal.	.405	-	—
l.c.l., works	gal.	.455	-	—
ex-whse	gal.	.57	-	—
steam-dist. dms., c.l., works, South.	gal.	.64	-	—
dlvd. N. Y	gal.	.82	-	—
tanks, works, South	gal.	.50	-	—
Diphenyl, bbls., c.l., works	lb.	.15	-	—
l.c.l. works	lb.	.16	-	—
Diphenyl in bags ¼c. lower.				
Oxide, perfume grade, cns	lb.	.54	-	.61
Phthalate, dms., c.l., works	lb.	.51¾	-	—
l.c.l., works	lb.	.53¾	-	—
Diphenylguanidine dms., ton lots	lb.	.48	-	—
smaller lots	lb.	.49	-	.50
Diphenylhydantoin-sodium, USP, dms	lb.	5.30	-	5.60
Dipropylene glycol dms., c.l., frt. alld	lb.	.16½	-	—
l.c.l., same basis	lb.	.17½	-	—
tanks, same basis	lb.	.14¾	-	—
Monomethyl ether dms., c.l., dlvd. E	lb.	.20	-	—
l.c.l., same basis	lb.	.21	-	—
tanks, same basis	lb.	.18½	-	—
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock	ton.	70.00	-	72.00
Divinylbenzene, 20-25% dms., c.l., works	lb.	.20	-	—
l.c.l., works	lb.	.21	-	—
tanks, works	lb.	.19	-	—
40-50%, dms., c.l., works, 100% basis	lb.	1.00	-	—
l.c.l., works, 100% basis	lb.	1.15	-	—
Dodecylbenzene, dms., c.l., frt. equald	lb.	.14½	-	—
l.c.l., same basis	lb.	.15½	-	—
tanks, same basis	lb.	.12½	-	—

Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots dlvd:—

Blue, FD & C, No. 1, cns	lb.	17.00		17.60
No. 2, cns	lb.	17.00		17.60
Green, FD & C, No. 1, cns	lb.	17.00		17.60
No. 2, cns	lb.	22.20		22.85
No. 3, cns	lb.	35.25		35.90
Orange, FD & C, No. 1, cns	lb.	3.65	-	3.75
No. 2, cns	lb.	4.65	-	4.75
Red, FD & C, No. 1, cns	lb.	7.55	-	7.85
No. 2, cns	lb.	4.00	-	4.10
No. 3, cns	lb.	22.20		22.85
No. 4, cns	lb.	7.20	-	7.50
No. 32, cns	lb.	5.30	-	5.40
Violet, FD & C, No. 1, cns	lb.	17.00		17.60
Yellow, FD & C, No. 1, cns	lb.	10.50		11.05
No. 3, cns	lb.	3.30	-	3.40
No. 4, cns	lb.	3.30	-	3.40
No. 5, cns	lb.	4.00	-	4.10
No. 6, cns	lb.	4.00	-	4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd:—

Black, D&C, No. 1, cns	lb.	10.95	-	—
Brown, D&C, No. 1, cns	lb.	16.10	-	—
Green, D&C, No. 5, cns	lb.	16.10	-	—
No. 6, cns	lb.	16.10	-	—
No. 7, cns	lb.	14.80	-	—
Orange, D&C, No. 3, cns	lb.	10.95	-	—
No. 4, cns	lb.	20.05	-	—
No. 5, cns	lb.	5.70	-	—
No. 10, cns	lb.	20.70	-	—
Red, D&C, No. 8, cns	lb.	2.85	-	—
No. 9, cns	lb.	2.85	-	—
No. 10, cns	lb.	2.30	-	—
No. 11, cns	lb.	1.85	-	—
No. 12, cns	lb.	2.65	-	—
No. 17, cns	lb.	10.95	-	—
No. 18, cns	lb.	24.00	-	—
No. 19, cns	lb.	15.45	-	—
No. 21, cns	lb.	3.60	-	—
No. 22, cns	lb.	10.95	-	—
No. 28, cns	lb.	24.65	-	—
No. 33, cns	lb.	17.45	-	—
Violet, D&C, No. 2, cns	lb.	16.10	-	—
Yellow, D&C, No. 7, cns	lb.	10.95	-	—
No. 10, cns	lb.	13.50	-	—
No. 11, cns	lb.	13.50	-	—

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—

Blue, Ext., D&C, No. 1, cns	lb.	16.10	-	—
Green, Ext., D&C, No. 1, cns	lb.	16.10	-	—
Red, Ext., D&C, No. 1, cns	lb.	13.50	-	—
Yellow Ext., D&C, No. 1, cns	lb.	10.95	-	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

20 Chrysoidine Y	lb.	.74	-	—
27 Fast light orange 2G	lb.	.90	-	—
31 Phloxine 2G	lb.	.74	-	—
36 Yellow 2G	lb.	.83	-	—
40 Orange R extra, conc	lb.	1.06	-	—
57 Fuchsine 6B	lb.	1.08	-	—
79 Scarlet 2R	lb.	.81	-	—
151 Orange AD	lb.	.55	-	—
161 Orange RR	lb.	.66	-	—
176 Fast red A	lb.	.99	-	—
179 Rubine XX, conc	lb.	1.14	-	—
180 Blue F4B	lb.	.92	-	—
185 Brilliant scarlet 3RN, conc.	lb.	.93	-	—
202 Chrome blue black, conc.	lb.	.75	-	—
203 Chrome black T	lb.	.78	-	—
208 Fast blue SR	lb.	.91	-	—
216 Chrome red B	lb.	.84	-	—
234 Brown Y	lb.	.98	-	—
246 Blue black, extra, conc	lb.	.95	-	—
275 Milling red 3R, conc	lb.	2.03	-	—
289 Navy blue 3R, conc	lb.	1.19	-	—
299 Black F, conc	lb.	1.54	-	—
304 Neutral black 2B, conc., 200%	lb.	2.01	-	—
326 Fast scarlet 4BNC	lb.	1.64	-	—
332 Bismarck brown RX, conc.	lb.	.95	-	—
365 Brilliant yellow, conc	lb.	2.57	-	—
382 Scarlet B	lb.	1.82	-	—
401 Diazo black BHD	lb.	.69	-	—
406 Blue 2B, extra conc	lb.	1.07	-	—
419 Red FC, conc	lb.	1.12	-	—
420 Brown M	lb.	.98	-	—
448 Red 4BX, conc	lb.	1.30	-	—
conc	lb.	1.50	-	—
561 Brown B	lb.	2.03	-	—
518 Diamine sky blue FF, extra,				
581 Direct black EB	lb.	.94	-	—
593 Green BY, conc	lb.	.72	-	—
596 Yellow Brown K, extra	lb.	.91	-	—
620 Yellow 2G	lb.	1.79	-	—
640 Yellow XX	lb.	1.61	-	—
655 Yellow OX	lb.	2.04	-	—
657 Green V	lb.	2.10	-	—
662 Brilliant green G	lb.	2.79	-	—
667 Brilliant milling green 6B, conc.	lb.	3.68	-	—
671 Blue EG	lb.	1.70	-	—
681 Crystal violet powder	lb.	2.15	-	—
686 Violet 4BXN	lb.	1.74	-	—
720 Brilliant blue BBG	lb.	1.88	-	—
729 Blue B, conc	lb.	2.79	-	—
749 Red BX	lb.	4.33	-	—
814 Yellow NN, conc	lb.	3.11	-	—

Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—

Auramine O	lb.	1.85	-	—
Black, basic blue	lb.	1.21	-	—
Jet	lb.	1.21	-	—
Blue, methylene, 2 B, conc	lb.	1.71	-	—
Brown Bismarck R, conc	lb.	.86	-	—
Chrysoidine, R, extra	lb.	.60	-	—
Y extra	lb.	.64	-	—
Fuchsine, conc	lb	3.08	-	—
Green, malachite, conc	lb	2.10	-	—
Rhodamine, B	lb	4.33	-	—
Safranine, Y, conc	lb	2.90	-	—
Violet methyl, B	lb	1.10	-	—

Dyes, coaltar for stains, water-soluble, 100-lb. dms., sellers' works:—

Azo rubine R, extra conc	lb.	1.04	-	—
Black, acid blue, B, extra	lb	86	-	—
Fast light, 3 G, extra	lb	2.04	-	—
Methanil, conc	lb.	91	-	—
Orange acid, Y, conc	lb.	47	-	—
Scarlet croceine, MOO	lb	1.45	-	—
Yellow azo, conc	lb	90	-	—

Oil-soluble, spirit-soluble, water-soluble dyes in kegs, 3c. higher; tins, 10c. higher.

E

Echinacea root, bls	lb	1.10	-	—
Egg albumin (see Albumin).				
Yolk, dried, dom., bbls	lb.	1.02	-	1.05
tanners, bbls.	lb	06	-	.06½
Elder flowers, bright, bls	lb	.35	-	.40
Elm bark, grinding, bls	lb.	.30	-	.32
powd., bbls., bxs	lb.	.45	-	—
select, bundles	lb.	.65	-	—

Emetine hydrochloride, USP, bots	oz.	32.95	-	35 00
Endrin, tech., dms., dlvd., basis 100%	lb.	3.75	-	—
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots	oz.	.98	-	1.00
hydrous, bots., 100-oz. lots	oz.	.92	-	—
Hydrochloride, tins, 100-oz. lots.	oz.	.75	-	—
Sulfate, cryst., tins, 100-oz. lots.	oz.	.72	-	—
powd., tins, 100-oz. lots	oz.	.73	-	—
Epichlorohydrin, dms., c.l., dlvd	lb.	.39	-	—
l.c.l., dlvd	lb.	.40	-	—
tanks, dlvd	lb.	.37	-	—
Epsom salt (see Magnesium sulfate).				
Epinephrine, syn., USP, bots., 100-gram lots	gram	.45	-	.55
Ergosterol, unirradiated, crvst	kilo.	150.00	-	—
Ergot, NF, dms., tin-lined	lb	3.00	-	—
Eserine salicylate, bots	oz.	35.75	-	—
Sulfate, bots	oz.	39.50	-	—
Ether (see specific product).				
Ethyl acetate, nat. ferment., 85-88%, dms., c.l., frt. alld	lb.	.13	-	—
l.c.l., frt. alld	lb.	.14	-	—
tanks frt alld	lb.	.11	-	—
95-96%, dms., c.l., frt. alld.	lb.	.13¼	-	—
l.c.l., frt. alld.	lb.	.14¼	-	—
tanks frt alld	lb.	.11¼	-	—
99%, dms., c.l., frt. alld	lb.	.13½	-	—
l.c.l. frt alld.	lb.	.14½	-	—
tanks, frt. alld	lb.	.11½	-	—
syn., 85-98%, dms., c.l., dlvd	lb.	.13	-	—
l.c.l., dlvd.	lb.	.14	-	—
tanks, dlvd	lb.	.11	-	—
95-98%, dms., c.l., dlvd	lb.	.13¼	-	—
l.c.l. dlvd.	lb.	.14¼	-	—
tanks, dlvd	lb.	.11¼	-	—
99%, dms., c.l., dlvd	lb.	.13½	-	—
l.c.l., dlvd.	lb.	.14½	-	—
tanks dlvd	lb.	.11½	-	—

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Calcium Carbonate Precipitated USP Light Low Sodium
Calcium Gluconate USP Powder Low Sodium
Potassium Chloride USP Granular Low Sodium
Potassium Chloride USP Powder Low Sodium
Potassium Carbonate Anhydrous Low Sodium
Ammonium Salicylate NF Low Sodium
Calcium Chloride USP Granular Low Sodium
Calcium Chloride Anhydrous Low Sodium

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Ethyl Acetoacetate—Glycerine, Refd., Dynamite

Ethyl acetoacetate, dms., c.l., dlvd. lb. .58 - —
l.c.l., dlvd lb. .59 - —
tanks, dlvd lb. .56 - —
Acrylate, dms., c.l., and truck load works lb. .44½- —
less than truckload, works lb. .45½- —
tanks, works lb. .42¾- —
Aminobenzoate, USP (see Benzocaine).
Bromide, tech., 98%, dms., c.l., frt. alld. E lb. .41 - —
l.c.l., frt. alld. E lb. .43 - —
Butyl ketone, dms., c.l., works lb. .35½- —
l.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Butyrate, works lb. .80 - 1.02
Carbamate (see Urethane).
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 - —
smaller lots, works lb. .72 - .80
vis., 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .65 - .70
smaller lots, works lb. .67 - .81
Chloride, tech., cyl., works lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Cinnamate, cns. lb. 2.71 - 3.45
Ethanolamines, mixed, dms., c.l., frt. alld., E. Miss lb. .42½- —
l.c.l. same basis lb. .43½- —
tanks, same basis lb. .40½- —
Ether, absolute, ACS, dms lb. .27 - —
anesthesia, USP, hospitals, 1-lb. cns lb. .89 - —
½-lb. cns lb. .97 - —
¼-lb. cns lb 1.05 - —
Indust., dms., c.l., dlvd E lb. .12 - —
l.c.l., dlvd. E lb. .13 - —
tanks, dlvd. E lb. .10 - —

Ethyl, gallate, dms., 100 to 2,000-lb. lots lb. 3.90 - 4.40
Iodide, cbys., works lb 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works lb. .51½- .52
Morphine hydrochloride, USP, bots oz. 11.85 - —
Nitrite (see Nitrous ether).
Oenanthate, dms. lb. 1.00 - 1.50
Oleate, dms., l.c.l., works lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethylorthosilicate).
40% available SiO_2, dms., dlvd. lb. .53½- —
N-Ethyl-a-naphthylamine, dms., works, lb. 1.02 - —
N-Ethyl-o-toluidine, bbls lb. .83 - —
Ethylamine (see Mono, Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .51 - —
l.c.l., frt. alld lb. .52 - —
tanks, frt. alld lb. .50 - —
Ethylbenzene, 99%, dms., c.l. lb. .19½- .20¼
l.c.l. lb. .20½- .21¼
tanks lb. .18½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .10¼- —
l.c.l., same basis lb. .12¼- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices 1c. per lb higher.
Glycol, dms., c.l., dlvd. E lb. .14¾- —
l.c.l., same basis lb. .15¾- —
tanks, same basis lb. .13 - —
Monobutyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., dlvd E lb. .21 - —
tanks, dlvd E lb. .18½- —

Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., dlvd. E lb. .21 - —
tanks, dlvd E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd E lb. .19½- —
tanks, dlvd. E lb. .16½- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., dlvd. E lb. .21 - —
tanks, dlvd. E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .28¾- —
l.c.l., dlvd. E lb. .29¼- —
tanks, dlvd. E lb. .27 - —
Monostearate, triple pressed, dms lb. .34 - —
Oxide, dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd. E lb. .24 - —
tanks, dlvd. E lb. .15 - —
Trichloride (see Trichloroethane).
Ethylenediamine 85-88% dms., c.l., dlvd. E., 100% basis lb. .46 - —
l.c.l., dlvd. E., 100% basis lb. .47 - —
tanks, dlvd. E., 100% basis lb. .44 - —
Ethylvanillin, cns., 25-lb. lots lb. 6.75 - 7.30
smaller lots lb 7.35 - 7.40
Eucalyptol, USP, cns., dms. lb 1.40 - 1.50
Eugenol, USP, bots. lb. 2.70 - 3.55
Euphorbia herb, bls lb. .15 - .17

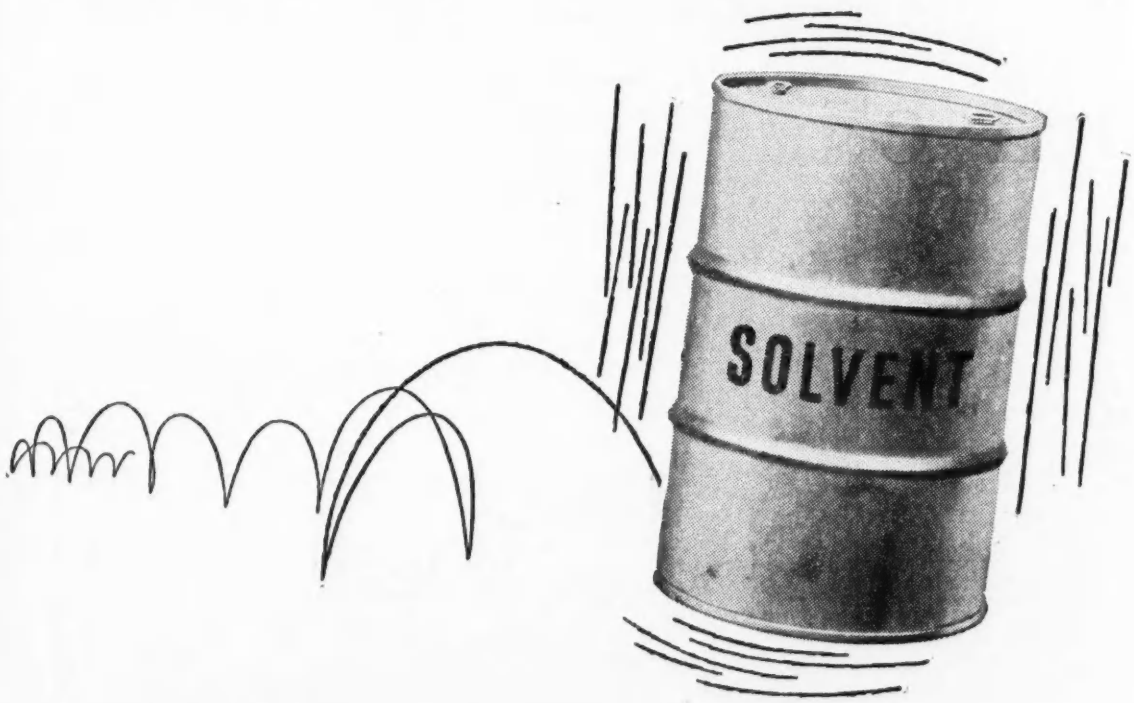
F

Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 - —
Feldspar in bags $3 per ton higher.
Fennel seed, Argentine, bgs lb. .11½- —
Czech, medium, bgs lb. .11½- —
Indian, light, bgs lb. .11½- —
Fenugreek seed, Moroccan, bgs. lb. .07½- —
Ferric acetate, liquor, 28°, bbls., c.l., works lb. .09 - —
l.c.l., works lb. .09¾- —
soln., USP IX, cbys lb. .16 - —
dms. lb. .17 - —
Cacodylate, NF, bots lb. 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 6.75 - —
l.c.l., works 100 lbs. 8.00 - —
indust., cryst., bbls., c.l., works. 100 lbs. 4.75 - 5.25
l.c.l., works 100 lbs. 5.75 - 6.25
42° Be, cbys., c.l., works. 100 lbs. 7.25 - 8.25
tanks, frt. equald., 100% basis 100 lbs. 3.25 - —
USP cryst., dms., works lb. .07½- .09
Citrate, gran., dms. lb. .86 - —
Glycerophosphate, NF, powd lb. 4.75 - 4.85
Hydrophosphite, NF, dms lb. 3.45 - —
Naphthenate liq., 6% Fe., dms., frt. alld lb. .25¾- —
Oxalate, gran., dms lb. .85 - .87
Phosphate, NF, soluble, gran., pearls, es lb. .64 - .65
Pyrophosphate, NF VII, soluble, gran., pearls, dms lb. .78 - .81
Resinate, 6¼% Fe, dms., frt. alld. lb. .29 - —
Stearate, dms., c.l., frt. alld lb. .37 - —
l.c.l., frt. alld lb. .38 - .42
Sulfate, partially hydrated, bgs., c.l., works ton. 31.75 -33.75
l.c.l., works ton. 34.75 -40.75
Ferric-ammonium citrate, brown, NF, gran., dms lb. .59 - —
green, USP XII, gran., dms lb. .59 - —
Oxalate, fine gran., dms lb. .25½- .28½
Ferric-potassium, oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms lb. .88 - —
Sulfate, gran., bgs., c.l., works. ton. 34.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton. 19.00 - —
bulk, c.l., works ton. 27.00 - —
USP cryst., bbls., dms lb 09½- .10
Fir balsam, Canada, cns gal. 32.00 - —
Oregon, bbls. lb. 4.00 - —
Fishliver oil (see Oil fishliver).
Fishmeal, menhaden, ground, domestic, 60% protein, bags, Balto area ton. 146.00 Nom.
Fishscrap, menhaden, dried, 60% protein, bgs., Balto area ton. 141.00 Nom.
Formaldehyde, NF, 37%, (inhibited), Zone 1, dms., c.l., dlvd. lb. .0585- .062
l.c.l., dlvd lb. .037 - —
tanks, dlvd lb. .033 - —
Zone 2, dms., c.l., dlvd lb. .035 - —
tanks, dlvd lb. .0420- —
methanol-free (uninhibited), Zone 1, tanks, dlvd lb. .03 - —
Zone 2, tanks, dlvd lb. .0595- —
Fleaseed (see Psyllium seed).
Fringetree bark, bls lb. .60 - .61
Fuller's earth, bgs., c.l., Ill. mines. ton. 19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton. 17.50 - —
calcined, bgs., c.l., same basis ton. 20.00- .21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton. 16.50 -17.00
200-mesh, bgs., c.l., same basis ton. 17.50 -18.00
spent bgs., c.l., shipt point ton. 4.50 - 5.00
Furfural, dms., c.l., works lb. .13 - —
l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
dlvd. W lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .20 - —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., c.l. lb. .45½- —
No 3, bbls l.c.l lb. .43½- —
liq., No. 1, bbls., l.c.l. lb. .22½- —
No. 2, bbls. c.l lb. .21½- —
No. 3, bbls., l.c.l lb. .19 - —
solid, No. 1, bxs., l.c.l. lb. .45 - —

G

G salt, 100% basis, bbls., frt alld lb. .73 - —
Gammapicoline (see g-Picoline).
Gelatin, edible, pure (pork skin), 75 Bloom test, bbl., c.l. lb. .53 - —
150 Bloom test, bbl., c.l. lb. .64 - —
200 Bloom test, bbl., c.l. lb. .71 - —
225 Bloom test, bbl., c.l. lb. .74 - —
275 Bloom test, bbl., c.l. lb. .81 - —
Gelsemium root, bls lb. .23 - .24
Gentian root, bls lb. .17 - .20
grd., bbls., bxs lb. .22 - .23
powd., bbls., bxs lb. .23 - .24
Geraniol, extra, cns., dms lb. 1.90 - 2.20
standard, cns., dms lb. .60 - 1.00
Geranyl acetate, cns lb. 1.45 - 2.20
Ginger, oleoresin, NF, from African root, bots lb. 4.00 - 7.75
from Jamaican root, bots lb. 6.00 -10.25
Root, African, bls lb. .32 - —
Jamaica, No. 1, bgs lb. No prices.
No. 2, bgs lb. .36 - —
No. 3, bgs lb. .35 - —
Nigerian, split, bgs lb. 27 - —
Glauber's salt, anhyd. (see Sodium sulfate).
Glue, bone, extracted, 86 jellygrams, bgs., c.l., dlvd lb. .17 - —
104 jellygrams, same basis lb. .19 - —
131 jellygrams, same basis lb. .21 - —
164 jellygrams, same basis lb. .23 - —
191 jellygrams, same basis lb. .25 - —
222 jellygrams, same basis lb. .26 - —
packers' 40 jellygrams, bgs., c.l., dlvd lb. .15½- —
65 jellygrams, same basis lb. .16½- —
86 jellygrams, same basis lb. .17 - —
115 jellygrams, same basis lb. .17½- —
135 jellygrams, same basis lb. .18½- —
164 jellygrams, same basis lb. .19½- —
renderers' 100 jellygrams, bgs., c.l., dlvd lb. .15 - —
Bone glue, l.c.l., prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-121, bgs., c.l., dlvd lb. .20 - —
122-149, bgs., c.l., dlvd lb. .22 - —
150-177, bgs., c.l., dlvd lb. .24 - —
178-206 bgs., c.l., dlvd lb. .26 - —
207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30 - —
267-298, bgs., c.l., dlvd lb. .32 - —
299-330, bgs., c.l., dlvd lb. .34 - —
331-362, bgs., c.l., dlvd lb. .36 - —
363-394, bgs., c.l., dlvd lb. .37 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .39 - —
461-494, bgs., c.l., dlvd lb. .40 - —
495-529, bgs., c.l., dlvd lb. .41 - .42
Hide glue l.c.l. prices 1c. higher.
Glycerine, nat., crude, saponification, 88%, to refineries, tanks, works lb. .23 Nom.
soaplye, 80%, tanks, works lb .21 Nom.
refd., BP, 98%, dms., c.l., dlvd lb. .30½- —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
dynamite, dms., c.l., dlvd lb. .30½- —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —

can a Solvent be "ebullient"?



Celanese* n-Butanol is more and more active in the new nitrocellulose developments

An article in CHEMICAL WEEK back in November (we'll send you a reprint if you missed it) described n-Butanol as "ebullient." We agree.

The new hot-spray lacquers are a case in point. Fewer coats and higher gloss are making these nitrocellulose lacquers more and more popular in automobile application. Another growing use for butanol is in butylated resins. But if your interest lies here, we recommend Celanese* n-Butyl Formcel*—a relatively water-free solution of Celanese Formaldehyde in Celanese n-Butanol. You skip 2 whole steps in the production cycle!

In any use, make Celanese your synthetic source for high purity n-butanol and its active partner, n-butyl acetate. Buy in combination carloads and save money. Get the complete "ebullient" story from your Celanese representative. Celanese Corporation of America, Chemical Division, Dept. 656-A, 180 Madison Avenue, New York 16, N.Y.

SPECIALIZED
Special Solvents
Acetone
Methanol
n-Butyl Acetate
n-Propyl Acetate
n-Propyl Alcohol
Isobutanol

Celanese* CHEMICALS

*Reg. U. S. Pat. Off.

Glycerine, refd., high gravity, dms., c.l., dlvd. lb. .30½ - —
l.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .30 - —
USP, CP, 95% dms., c.l., dlvd. lb. .29½ - —
l.c.l., dlvd. lb. .30 - —
tanks, dlvd. lb. .29 - —
yellow, distilled, dms., c.l., dlvd. lb. .30 - —
l.c.l., dlvd. lb. .30½ - —
syn., dms., c.l., dlvd. lb. .30½ - —
l.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .30 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30%, dms., c.l., works. lb. .18½ - —
l.c.l., works. lb. .19 - —
tanks, works. lb. .18 - —
Gold chloride, acid-brown, bots. oz. 22.50 - 23.00
acid-yellow, bots. oz. 20.00 - 20.50
Golden seal root, NF, tested, bls. lb. 2.25 - 2.50
powd., bxs. lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse. lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, brown, tanks, dlvd. lb. .06⅝ - —
house, tanks, dlvd. lb. .07½ - —
white, choice, not all hog, tanks, dlvd lb. .08⅜ Nom.
yellow, tanks, dlvd. lb. .07¾ - —
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs, works. lb. 5.10 - —
tungstated, PTMA, kgs., works lb. 6.00 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .38 - —
16-30%, bbls., same basis lb. .39 - —
31-45%, bbls., same basis, lb. .40 - —
45-49%, bbls., same basis, lb. .43 - —
50%, bbls., same basis lb. .48 - —
reduced color, 25%, bbls., same basis lb. .19 - —

Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

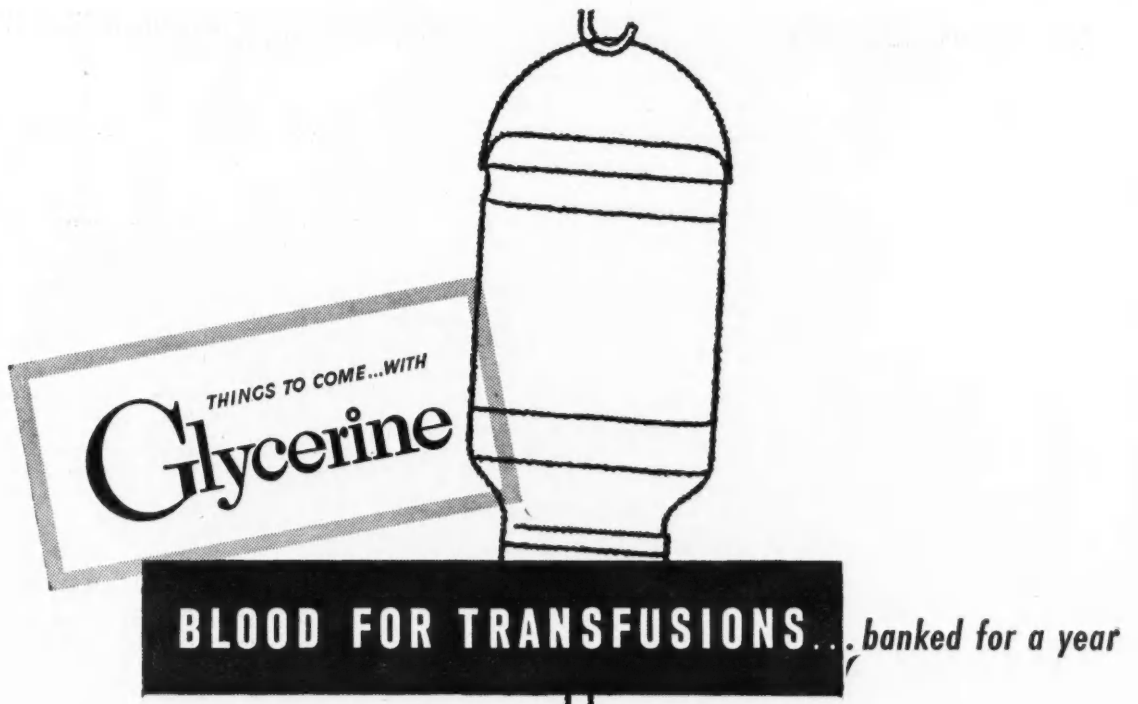
Chromium oxide, hydrated, bbls., dms., c.l., frt. alld. lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld. lb. .39¼ - —
l.c.l., same basis lb. .39¾ - —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works. lb. 3.95 - —
resinated, bbls. lb. 3.50 - —
water dispersable, bbls. lb. 1.71 - —
Pigment B, kegs. lb. 1.35 - —
paste, kegs. lb. .38 - —
Grindelia robusta herb, bls. lb. .38 - .40
Guaiacol, NF, cryst., dms., tins lb 2.10 - 2.15
liq., cbys., dms. lb. 2.30 - 2.40
Carbonate, NF VII, dms. lb. 3.40 - 3.45
Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs. lb. .23 - .25
powd., USP, bbls. lb. .28 - .30
Asafetida (see A).
Asphaltum (see A).
Benzoin Sumatra, cs. lb. .38 - .42
Camphor (see C).
Cellulose high vis., bgs., 23,000-lb. lots or more, works, frt. alld. lb. .55 - —
smaller lots, same basis. lb. .57 - —
Copal, Congo, No. 1, bgs. lb. .21 - .23
No. 2, bgs. lb. .18½ - .20
No. 3, bgs. lb. .16½ - .18
Manila C, bgs. lb. .42 - .44
CBB, bgs. lb. .35 Nom.
DBB, bgs. lb. .31 - .33
DK, bgs. lb. .22 - .24
dust, bgs. lb. .14 - .16
MA, soft, bgs. lb. .22 - .24
WS, bgs. lb. .34 - .36
Philippine, pale, chips, bgs. lb. .24 - .26
nubs, bgs. lb. .34 - .36
seeds, bgs. lb. .20 - .22
sorts, bgs. lb. .22 - —
Pontianak, chips, bgs. lb. .25 - —
nubs, bgs. lb. .39 - .40
Dammar, Batavia, A/E, cs. lb. .27 - .29
dust, bgs. lb. .16½ - .17½
E, bgs. lb. .20 - .22
East India, batu, bold, bgs. lb. .14 - .15½
nubs and chips, bgs. lb. .08 - .09
black, bold, bgs. lb. .14 - .16
unscraped, bgs. lb. .11 - .13
nubs and chips, bgs. lb. .11 - .13
pale, chips, bgs. lb. .13½ - .14½
nubs, bgs. lb. .18 - .20
Siam, cs. lb. .35 - .37
Singapore, No. 1, bgs. lb. .40 - .42
No. 2, bbls. lb. .27 - .29
No. 3, bbls. lb. No Stocks
dust, bgs. lb. .16½ - .17
seeds, bgs. lb. .20 - .22
Ester, gum-rosin type, dms., c.l., dlvd. fill., Ind., Ky., Mich., Mid-Atl. States, N.E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .15½ - —
wood-rosin type, dms., c.l., same basis lb. .15 - —
Karaya, No. 1, NF, powd., bbls. lb. .48 - .50
No. 2, powd., bbls. lb. .36 - .38
No. 3, powd., bbls. lb. .30 - —
Locust bean, powd., bgs. lb. .31 - .33
Myrrh, cs. lb. .38 - .40
Opium (see O).
Olibanum siftings, cs. lb. .15 - .20
tears, cs. lb. .22 - .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs. lb. 3.00 - 3.50
No. 2, cs. lb. 2.55 - 2.60
No. 3, cs. lb. 1.75 - 1.80
powdered, USP, bbls. lb. 1.25 - 1.35
Gypsum, plaster of paris, 100-lb. paper, bgs., trucks, dlvd. N. Y. C. ton 20.30 - —
terra alba, dom., same basis. ton 19.00 - —
works, N. Y. C. ton 16.00 - —
imp., English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse. ton 60.00 - 62.00

H

Hawthorn berries, bgs. lb. .28 - .32
Heliotropin, cryst., cns. lb. 3.50 - 4.25
Hellebore root dom. green, bls. lb. .55 - .65
Helonias root, bls. lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l. lb. .47 - —
No. 2, bbls., l.c.l. lb. .43 - —
No. 3, bbls., l.c.l. lb. .41 - —
No. 4, bbls., l.c.l. lb. .39 - —
No. 5, bbls., l.c.l. lb. .37 - —
paste, No. 1 bbls. l.c.l. lb. .20½ - —
Henbane leaves, bls. lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J. gal. .19 - —
Baytown, Tex. gal. .14¾ - —
Borger, Tex. gal. .14¾ - —
Hesperidin methylphalcone, bots., works lb 50.00 - —
Hexachlorophene, dms. lb. 2.60 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 1,000-lb. lots or more, Perth Amboy or N Y C. lb. .232 - —
smaller lots, same basis lb. .242 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .239 - —
smaller lots, same basis lb. .249 - —
USP, dms., 500-lb lots or more, same basis lb. .40½ - —
smaller lots, same basis lb. .41½ - —
Hexamine (see Hexamethylenetetramine).
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex. gal. .15½ - —
Borger, Tex. gal. .13½ - —
1-Hexanol, dms., c.l., works lb. .34½ - —
l.c.l., works lb .35 - —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.50 - 7.50
Salicylate, dms. lb. 1.75 - —
Hexylene, glycol, dms., c.l., dlvd lb. .16 - —
l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .14 - —
n-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd. lb. 14.50 - —
Histamine diphosphate, USP, bots. kilo 456.00 - —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works. kilo 80.00 - 85.00
1-5 kilo lots, works. kilo. 90.00 - 95.00
Homatropine hydrobromide, USP bots oz 9.35 - 10.60
Methylbromide, USP, bots. oz. 8.50 - 9.00
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 7.00 - —
Horehound herb, bls. lb. .16 - .19
Hoscine salts (see Scopolamine).
Hydrastine bots oz. 29.50 - 31.00
Hydrochloride, NF bots oz 29.50 - 31.00
Sulfate, bots. oz. 35.00 - 37.00
Hydrastinine 10 grain bots bot 1.95 - —
Hydrastis (see Goldenseal).
Hydrazine, free base, tct. dms., Lake Charles, La lb. 3.00 - 3.30
Hydrate, 100%, tct. dms., Lake Charles, La lb. 1.60 - 1.90
85%, tct. dms., same basis lb. 1.35 - 1.55
Hydrocortisone acetate, bulk, bots., dms gram 6.00 - —
alcohol, bulk, bots., dms gram 6.00 - —
Hydrofuramide, dms., fib. cins., works lb .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E lb. .30½ - .32½
cyls., dlvd. W lb. .39 - —
tanks, works lb. .21 - —
Hydrogen peroxide, USP, bbls., dlvd. lb. .03¾ - .05
35%, dms., c.l., dlvd lb. .202 - —
l.c.l. dlvd. lb. .211 - —
tanks, dlvd. lb. .1800 - —
Hydroquinone photo grade bbls. dms. lb. .98 - 1.00
tech., dms., c.l., dlvd lb. .77½ - —
l.c.l., same basis lb. .79½ - —
Hydroxycitronellal, cns lb. 5.10 - 6.00
Hyoscyamine, bots oz. 15.75 - 16.00
Hydrobromide, bots oz. 11.00 - 12.00
Sulfate, bots oz. 10.50 - 11.50
Hypernic extract, cryst., No. 2, bbls., l.c.l. lb. .52 - —
liq., No. 1, bbls., l.c.l. lb. .35 - —
No. 2, bbls., l.c.l lb. .27 - —

I

Ichthammol, NF, dms lb. .60 - .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb 17.00 - 21.00
Inositol, bots, dlvd lb 5.00 - —
dms., dlvd lb 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.45 - —
resub, USP jars, dms lb. 2.30 - 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 - —
Iodoform, NF, dms., kgs lb 4.90 - 5.00
a-Ionone, cns. lb. 6.35 - 6.85
6.80 - 11.25
b-Ionone, cns lb. 4.30 - 11.25
Methyl (see under M)
Ipecac root, bgs lb. 8.50 - 9.00
powd., bbls., bxs lb. 9.25 - —



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Irish moss, bleached, prime, bls lb. .30 - .35
Iron Compounds (see Ferric or Ferrous).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .62 - .95
formate dms. lb .80 - —
Propionate, dms lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade dms. c.l. dlvd E. of Rockies lb. .13¼- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
l.c.l., dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
l.c.l., dlvd lb. .22½- —
tanks, dlvd lb. .19½- —
Isoeugenol, cns lb. 3.45 - 4.25
Isoniazid, powd., bulk, 25-kilo lots or more kilo 23.00 - 25.50
smaller lots kilo 24.00 - 26.00
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24¼- —
l.c.l., works lb. .24¾- —
tanks, works lb .22½- —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dvld. lb. .12 - —
l.c.l. same basis lb. .13 - —
tanks, same basis lb. .10 - —
Alcohol (see Alcohol, Isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
l.c.l. dlvd lb. .08 - —
tanks, dlvd lb .05 - —
Isopropylamine (see Mono, Di, or Tri-).
Isoquinoline, dms., works lb. .65 - 1.25

J

Jalap root, NF, bls lb. .38 - .55
powd., bbls., bxs lb. .49 - .66
Juniper berries, bgs lb. .18 - .20
Tar, NF, dms lb. .42 - .60

K

Kaolin (see also Clay, China).
NF, powd., fib. dms lb. .08 - .16½
colloidal, fib. dms lb. .15 - .15½
Kola nuts, bgs lb. .12 - —

L

Lactose, crude, bgs., c.l., works lb. .15 - —
edible, fib dms., 30,000-lb. lots, works lb. .22 - —
2,000-lb. lots, works lb. .22¾- —
200-1,800-lb. lots, works lb. .23¼- —
Edible lactose in bgs., 1c. lower.
USP, fib. dms., 30,000-lb. lots, works lb. .24 - —
2,000-lb. lots, works lb. .24¾- —
200-1,800-lb. lots, works lb. .25¼- —
USP lactose in bgs., 1c. lower
Lady's slipper root, bls lb. 1.70 - 1.75
Lanolin, cosmetic, dms., works lb. .28 - .30
USP, anhyd., dms., works lb. .26 - .28
hydrous, dms., works lb. .25 - .27
Lard, cash, dms., Chicago lb. .1265 Nom.
Larkspur seed, bgs lb. .20 - .23
Lauryl chloride, dist., dms, c.l., works, frt. equald lb. .74 - —
l.c.l., same basis lb .75 - —
Methacrylate, normal, dms., c.l. or truckload lb. .65½- —
Lavender flowers, medium, bls lb. .55 - .60
ord., bls lb. .16 - .20
select, bls lb. .90 - —
Lead acetate, white, cryst., bbls lb. .23 - —
gran, bbls lb. .22 - —
powd., bbls lb. .23 - —
NF, cryst., gran., powd lb. .31 - .32
Arsenate, acid powder, dealers, 3-lb. bgs, or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
l.c.l., frt alld lb. .28½- —
1-lb bgs., c.l. lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .15¾- —
l.c.l., same basis lb. .16¾- —
Carbonate (see Lead, white).
Chloride, dms. lb. .45 - —
Iodide, NF, V jars lb. 3.82 - —
Linoleate, fused, 26%% Pb, dms. lb. .33 - —
Metal, pigs, prime, N. Y. lb. .15 - —
St. Louis lb. .1480-
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .33¾- —
10,000-20,000-lb. lots same basis lb. .34¾- —
2,000-10,000-lb. lots, same basis lb. .35¼- —
200-2,000-lb. lots, same basis, lb. .35¾- —
Prices ex wnse, Jersey City, N. J., 4½c. per lb. higher.
Monosilicate, bgs., c.l., works, frt. equald lb. .1580- —
l.c.l., same basis lb. .1630- —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .17¼- —
24% Pb, dms., dlvd lb. .23¾- —
solid, 37% Pb, dms., dlvd lb. .31¼- —
Nitrate, bbls lb. .22¼- —
Orthosilicate gel., 50% Pb_3O_4, dms., works lb. .32¾- —
60% PbO, dms., works lb. .52¾- —
Peroxide, tech., powd., bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. equald lb. .17½- —
l.c.l., same basis lb. .18 - —
97% Pb_3O_4, bbls., c.l., same basis lb. .17¾- —
l.c.l., same basis lb. .18 - —
98% Pb_3O_4, bbls., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .18½- —
Resinate, precip., 23% Pb, dms., dlvd lb. .31 - —
Salicylate, normal, dms., works lb. .46 - —
Sulfate (see Lead, blue, basic sulfate, Lead, white, basic sulfate).
Tallate, liquid, 16% Pb, dms lb. .15¼- —
24% Pb, dms lb. .20¼- .20½
White, basic carbonate, bgs., c.l., shipt. point, frt. alld lb. .17½- —
l.c.l., same basis lb. .18½- —
basic silicate, bgs., c.l., shipt. point, frt. alld lb. .16 - .19¼
l.c.l., same basis lb. .17 - .20¼
basic sulfate, bgs., c.l., shipt. point, frt. alld lb. .15¾- —
l.c.l., same basis lb. .16¾- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .15 - .17
l.c.l., same basis lb. .15½- .17½
unbleached, non-ret., dms., c.l., same basis lb. .13 - .15
l.c.l., same basis lb. .14½- .16½
dl-Leucine, dms., works lb. 12.95 - 15.00
Licorice root, whole, bbls lb. .10 - .12
gran., bbls lb. .15 - .17
powd., bbls lb. .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
l.c.l., works lb. .06¾- —
Lime, agricultural, bulk, works ton 14.50 - —
Chemical (quicklime), lump, pebble, bulk, Adams, Mass ton 12.50 - —
Annville, Pa ton 11.50 - —
Austin, Texas ton 9.50 - —
Bellefonte, Pa. ton 11.50 - —
Buffalo, N. Y. ton 14.00 - —
Cedar Hollow, Pa. ton 11.50 - —
Duluth, Minn. ton 13.50 - —
El Paso, Texas ton 14.00 - —
Farnams, Mass. ton 14.00 - —
Gibsonburg, Ohio ton 12.50 - —
Hannibal, Mo. ton 10.00 - —
Keystone, Ala. ton 10.25 - —
Kimballton, Va. ton 10.25 - —
Knoxville, Tenn. ton 10.50 - —
Lee, Mass. ton 12.50 - —
Lewisburg, Ohio ton 10.00 - —
Limedale, Ark. ton 11.00 - —
Los Angeles, Cal. ton 25.00 -26.84
Marble Cliff, Ohio ton 10.00 - —
Martinsburg, W. Va. ton 11.00 - —
McNeil, Tex. ton 11.00 - —
Mosher, Mo. ton 11.25 - —
Nelson, Ariz. ton 14.50 -23.65
Quincy, Ill. ton 10.00 -13.00
Reddick, Fla. ton 13.50 - —
Scotrock, Ala. ton 10.25 - —
Springfield, Mo. ton 11.25 - —
Winooski, Vt. ton 15.50 - —
Woodville, Ohio ton 11.50 - —
York, Pa. ton 15.50 - —
Hydrated, paper bgs., Adams, Mass. ton 15.50 - —
Annville, Pa ton 14.00 - —
Austin, Texas ton 13.00 - —
Bellefonte, Pa ton 14.50 - —
Buffalo, N. Y. ton 16.00 - —
Cedar Hollow, Pa ton 14.50 - —
Chicago, Ill. ton 15.00 - —
Duluth, Minn. ton 15.00 - —
El Paso, Texas ton 17.50 - —
Engle, W. Va. ton 14.50 - —
Farnams, Mass. ton 14.00 - —
Gibsonburg, Ohio ton 16.50 - —
Hannibal, Mo. ton 12.00 - —
Keystone, Ala. ton 13.50 - —
Kimballton, Va. ton 13.50 - —
Knoxville, Tenn. ton 13.00 - —
Lee, Mass. ton 15.50 - —
Lewisburg, Ohio ton 14.00 - —
Limedale, Ark. ton 13.50 - —
Marble Cliff, Ohio ton 13.50 - —
McNeil, Tex. ton 14.50 - —
Menominee, Mich. ton 14.00 - —
Mosher, Mo. ton 13.50 - —
North Tazewell, Va. ton 12.75 - —
Quincy, Ill. ton 10.00 -12.00
Reddick, Fla. ton 16.00 - —
Scotrock, Ala. ton 13.50 - —
Springfield, Mo. ton 13.50 - —
Winooski, Vt. ton 15.50 - —
Woodville, Ohio ton 14.50 - —
York, Pa. ton 14.50 - —
Spray, paper bgs., Adams, Mass. ton 17.00 - —
Annville, Pa ton 17.00 - —
Austin, Texas ton 13.00 - —
Bellefonte, Pa. ton 17.50 - —
Carey, Ohio ton 11.00 - —
Duluth, Minn. ton 17.50 - —
Engle, W. Va. ton 14.50 - —
Farnams, Mass. ton 14.00 - —
Gibsonburg, Ohio ton 16.50 - —
Keystone, Ala. ton 13.50 - —
Kimballton, Va. ton 13.50 - —
Lee, Mass. ton 17.00 - —
Lewisburg, Ohio ton 16.00 - —
Marble Cliff, Ohio ton 16.00 - —
McNeil, Tex. ton 16.00 - —
Menominee, Mich. ton 14.00 - —
Mosher, Mo. ton 13.50 - —
North Tazewell, Va. ton 12.75 - —
Reddick, Fla. ton 16.00 - —
Rockland, Me. ton 10.00 - —
Springfield, Mo. ton 13.50 - —
Scotrock, Ala. ton 13.50 - —
Winooski, Vt. ton 17.00 - —
Woodville, Ohio ton 16.50 - —
York, Pa. ton 15.50 - —
Lime salts (see Calcium).
Lime-ammonia nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 7.35 - 7.65
ex lignaloe wood oil, dms lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms. lb. 6.75 - 7.05
96-98%, dms lb. 6.75 - 7.15
ex petitgrain, bots lb. 3.90 - 5.25
Lindane, 25% formulation, dealers, dms., works lb. 1.58 - —
99%, tech., dealers, dms., dlvd., lb. 3.10 - —
Linden flowers with leaves, bls lb. .30 - —
without leaves, bls lb. .35 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills ton. 72.00 -73.00
extracted, 36%, bulk, same basis ton. 68.00 - —
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .16½- —
l.c.l., same basis lb. .17 - —
Lithium benzoate, nms lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald lb. 2.16 - —
Carbonate, NF, c.l., works, or dlvd. lb. 1.42½- —
l.c.l., same basis lb. 1.43½- 1.48½
tech., c.l., works, or dlvd lb. .95 - 1.00
l.c.l., same basis lb. 1.00 - 1.20

Paintmakers Profit with

WITCO STEARATES

For excellent flatting properties—
Aluminum, Calcium, Magnesium, Zinc Stearates

For outstanding suspension—
Aluminum Stearate

For highest quality sanding sealers—
Zinc Stearate Lacquer Grade

For elimInating seeding difficulties—
Calcium Stearate #40

For short, buttery silk screen bases—
Zinc Soap #26

Each WITCO Stearate is pure, uniform, dependable... produced under strictest quality control. Samples on request. Our Technical Service Laboratory will be glad to assist you with special paint problems.

WITCO PLANTS AND PRODUCTS

Sunray, Texas: Carbon Black • **Westlake, Louisiana:** Oil Black

Lawrenceville, Illinois: Asphalt • **Perth Amboy, New Jersey:** Asphalt

Brooklyn, New York: Stearates, Vinyl Stabilizers • **Eunice, New Mexico:** Carbon Black

Chicago, Illinois: Stearates, Esters, Driers,
Vinyl Stabilizers, Plasticizers, Mastics, Organic Chemicals

Witco, Texas: Carbon Black, Hydrocarbons • **Ponca City, Oklahoma:** Furnace Blacks

Los Angeles, California: Esters, Driers • **Droitwich, England:** Rubber Latex

WITCO CHEMICAL COMPANY
260 Madison Avenue, New York 16, N.Y.
Chicago • Cleveland • Boston • Los Angeles • San Francisco
Houston • Atlanta • Akron • London and Manchester, England

Lithium chloride, CP, anhyd., ton lots..lb. 1.28½- —
tech., cryst., dms.....lb. 1.10 - 1.25
Citrate, NF, dms.....lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½- —
ton lots, dlvd.....lb. 2.18½- —
less ton lots, dlvd.....lb. 2.23½- —
Hydride, powd., dms., works....lb.15.00 - —
Hydroxide, monohydrate, dms., c.l., t.l., dlvd..lb. .97½- —
l.c.l., 1-ton lots or more, lb. .98 - .98½
Manganite, dms., works.....lb. .95 - 1.15
Nitrate, dms., 100-lb. lots.....lb. 2.25 - —
Salicylate, dms.....lb. 1.60 - 1.70
Silicate, dms., works.....lb. 1.10 - 1.30
Sulfate, dms., 100-lb. lots.....lb. 1.45 - —
Titanate, dms., works.....lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd..lb. .07½- —
t.c.l., dlvd. lb. .08¼- .08½
titanated (high-strength), bgs., c.l., dlvd..lb. .10 - —
t.c.l., dlvd lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.
Lobelia herb, bls.....lb. 1.25 Nom.
Lobeline sulfate, bots., works oz.29.50 -33.50
Logwood extract, cryst., No. 1, bbls., l.c.l..lb. .41 - —
No 2, bbls l.c.l lb. .39 - —
liq., No. 1, bbls., l.c.l.....lb. .20 - —
No 2, bbls. l.c.l.....lb. .19 - —
No 3, bbls l.c.l.....lb. .18½- —
solid, No. 1, l.c.l.....lb. .35 - —
Lycopodium, cs .....lb. 1.50 - —
di-Lysine hydrochloride, bots..kilo.140.00 -150.00

M

Mace, Siauw, No. 1, bls. .....lb. 1.40 - —
West Indian, No. 1, bls.....lb. 1.39 - —
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼- 26
syn. rubber grade, light, bgs., c.l., works lb. .29¼- —
l.c.l., works.....lb. .30 - —
extra light, works.....lb. .29¼- .30
USP, light, ctns.....lb. .35 - .36
heavy, bbls .....lb. .36 - .38
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewalah, Wash. ton.38.00 - —
Magnesium bromide, jars.....lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
truckloads, frt. equald lb. .11 - —
l.c.l., frt. equald lb. .12 - .13
USP, bgs., c.l., frt. equald lb. .12½- —
t.l., frt. equald.....lb. .13 - —
l.c.l., frt. equald.....lb. .14 - .15

Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.

Chloride, anhyd., 92% flake or pebble, dms., c.l., works, lb. .12¾- —
t.c.l., same basis lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton.50.00 - —
l.c.l., bgs .....ton.55.00 -105.00
Gluconate, dms., cns.....lb. 1.30 - 1.37
Glycerophosphate, dms., works lb. 5.40 - 5.50
Hydroxide, NF, medicinal, bbls., dms kgs lb. 26½- .30
Metal, 99.8% ingots, cs., works lb. .27 - .2820
sticks, cs., works, frt. alld, on carlots lb. .46 - .48
Oxide (see Magnesia calcined)
Peroxide, 15%, dms., works ...lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc).
Silicofluoride, bbls., works lb. .09 - .10
Sulfate, tech., bgs., c.l., works, 100 lbs. 2.15 - —
l.c.l., works .....100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb lots lb. .40 - —
100-lb lots .... lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher

Malathion, dms., c.l., works....lb. .94 - —
l.c.l., works .....lb. .96 - .98
Maleic anhydride, dms., c.l., dlvd. E lb. .27 - —
t.c.l. dlvd. E .....lb. .28 - —
Prices on maleic anhydride W of Rockies 1½c. higher
Mandrake root, bls.....lb. .30 - .32
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate tech bbls lb. .24 - —
Carbonate, bbls., works.....lb. .22 - —
Chloride, anhyd., dms., works.lb. .25½- —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, paper bgs., gross for net, works, ton.88.00 - —
burlap bgs., paper-lined, works ton.91.50 - —
dms., works ton.94.00 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher
Gluconate, dms.....lb. 1.79 - 1.93
Glycerophosphate, NF, fib dms lb. 4.70 4.80
Hydrate, bbls., dlvd.....lb. .36 - —
Hypophosphite, NF, dms .....lb. 3.52 - —
Linoleate, liq., 4.35% Mn., dms., lb. .32½- —
solid, precip., 8.2% Mn, bbls. lb. .37½- —
Metal, cs., dlvd. East lb. .30 .32
Naphthenate, liq., 6% Mn., dms., frt alld lb. .27 - —
Resinate, fused, 3½% Mn, dms lb. .23 - —
precip., 6½-7% Mn., cms lb. .27 - —
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S. E ton.80.50 - —
l.c.l., dlvd. S. E ....ton.87.50 - —
Tallate, 6% dms .....lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton.68.00 - —
So. American 30% tannin, c.l., ex dock ton.55.00 -58.00
Mannitol, coml., fib. dms., ton-lots, works lb. .47 - —
dm. to ton lots, works....lb. .50 - —
Melamine, bgs., ton lots, works lb. .33 - —
500 to 2,000-lb lots, works lb. .33½- —
smaller lots, works lb. .38½- —
Menadione USP, bots gram. .06 06½
Menthol, Nat., USP, Brazilian, cns lb. 7.75 Nom.
Japanese, cs .....lb.13.00 - —
syn. USP, racemic, cns.....lb. 5.45 - —
Menthyl salicylate, tins.....lb. 4.00 4.25
2-Mercaptobenzothiazole, bgs., fib, cms ton lots works frt. alld lb. .38 - —
less ton lots, same basis lb. .40 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .48 - —
less ton lots, same basis lb. .50 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
gran or powd., dms., 50-lb. lots or more lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib. dms..lb. 6.84 - —
Iodide, red, NF, fib. cms .....lb. 7.72 - —
Oxide, red, NF, powd., fib. dms lb. 5.97 - 6.01
yellow, tech. (see Yellow, mercury oxide),
USP, fib. dms.....lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF.....lb. 7.72 - —
Mercury, ammoniated (see White precipitate USP).
Metal, 76 lb. per flask net flask.322.00 -324.00
Mesityl oxide, dms., c.l., dlvd...lb. .1330- —
l.c.l., dlvd. .....lb. .1450- —
tanks, dlvd. .....lb. .1150- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Choloraniline)
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt alld gal. .70 - —
Prices on natural methanol W of Miss., 3c. higher.
syn., Zone 1, dms., c.l., dlvd., or truckload min., frt. alld, gal. .42 - —
l.c.l., same basis gal. .43 - —
tankwagon, 2-4,000 gals., dlvd., Metropolitan areas gal. .30 - —
tanks, dlvd., or 4,000 gal. min., frt. alld gal. .27 - —
4,000 gal. min., frt. equald, with Camden, N. J gal. .25½- —
Zone 2, dms., c.l., or truckload min., frt. alld. or dlvd gal. .47 - —
l.c.l., same basis gal. .53 - —
tankwagon, 2-4,000 gals. min. dlvd. Metropolitan areas. gal. .35 - —

Methanol, syn., Zone 2, tanks, 4,000 gal., min., frt. alld. or dlvd..gal. .32 - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetretramine).
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 - —
feed grade, 98% fib dms. same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers dms. cs., frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 up. .20½- —
l.c.l., same basis.....lb. .21 - —
hydrogenated, non-ret. dms., c.l., dlvd., zone 1 lb. .21 - —
l.c.l., same basis.....lb. .21½- —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss, Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
syn., dms., c.l., frt. alld. E gal. .57 - —
l.c.l., frt. alld. E.....gal. .63 - —
tanks, frt. alld E.....gal. 45 - —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Lithium Chloride—Methyl Cyclohexanol

Methyl acrylate, dms., c.l., and truckload, works lb. .44½- —
less than truckload works lb. .45½- —
tanks, works .....lb. .42¾- —
Alcohol (see Methanol)
Amyl acetate, dms., c.l., dlvd. E lb. .15 - —
t.c.l., dlvd. E .....lb. .16 - —
tanks, dlvd. E .....lb. .13 - —
Ketone, dms., works.....lb. 1.05 - —
Anthranilate, cns. .....lb. 2.50 2.65
Benzoate, cns., dms.....lb. .53 - .65
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Cellulose, special, vis. (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt alld. on 100 lbs lb. .89 1.00
standard vis., (15-400 cps.), 50-lb., c.l., alld lb. .66 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 .85
Chloride, indust., cyls., frt. equald, lb. .21 - —
tanks, multi-unit, same basis lb. .15 - —
single unit, same basis lb. .11½- —
refrigerator mfrs., cyls., dlvd lb. .40 - .42
other consumers or service men, cyls., dlvd lb. .57 —
Cinnamate, cns. .....lb. 1.43 1.80
Cyclohexanol, dms., c.l., works, lb. .35½- —
t.c.l., works .....lb. .36 - —
tanks, works .....lb. .34 - —

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From pharmaceuticals to fertilizers and building board to rubber, Magnesia compounds serve industry as fillers, extenders, adsorptive and conditioning agents, and many other uses. Michigan's brine wells are a superlative source of these useful compounds. Michigan Chemical Corporation now in its 20th year producing quality chemicals from these wells, can be depended upon to supply you with your magnesia requirements.

TYPICAL ANALYSES OF MICHIGAN MAGNESIA COMPOUNDS

	No. 1 Calcined Magnesite	No. 5 Calcined Magnesite	No. 15 Calcined Magnesite	No. 30C Light Calcined Magnesia	No. 40 Extra Lt. Calcined Magnesia	Basic Magnesium Carbonate	(NF Grade) Magnesium Hydroxide	(Tech. Grade) Magnesium Hydroxide
Bulk density, weight per cubic foot	60 lb.	28 lb.	24 lb.	8½ lb.	5 lb.	5.5 lb.	15 to 25 lb.	app. 20 lb.
Ignition loss:	0.5%	1.5%	2.5%	1.9%	3.0%	56.5%	PASSES N. F. IX SPECIFICATIONS	31.4%
Chloride (as CL):	0.08	0.1	0.2	0.25	0.25	0.2		
Analysis, ignited basis:						NOT IGNITED		NOT IGNITED
SiO_2	0.3	0.3	0.3	0.3	0.3	0.15		0.20
Fe_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
Al_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
CaO	1.0	1.0	1.0	1.0	1.0	0.7		0.7
Mn				0.01	0.01	0.00		
Free Moisture						1.5		2.0
Screen test: Through 200 mesh		95%		99.9%	99.9%	99.99%	99.0%	99.0%
Screen test: Through 325 mesh			99.5%	99.5%	99.5%	99.5%		

We will be glad to provide further information on these Magnesia compounds, or to send you a Michigan Chemical Catalog containing technical data and other information on Michigan Chemical products.

MICHIGAN CHEMICAL CORPORATION Saint Louis, Michigan

EASTERN SALES OFFICE:
230 Park Avenue
New York 17, New York

BASIC MANUFACTURER OF INDUSTRIAL, PHARMACEUTICAL AND AGRICULTURAL CHEMICALS

Methyl Ethyl Ketone—Nitropropane

Methyl ethyl ketone, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
Formate, refd., dms lb. .35 - .40
tech. non-ret dms any quantity, works lb. .10 - —
tanks works lb. .07 - —
Heptin carbonate, bots lb. 33.00 -42.00
p-Hydroxybenzoate tib dms lb 1.90 2.00
Ionone, standard, cns. dms lb. 3.80 4.65
Isobutyl carbinol, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
Isobutyl ketone, dms., c.l., dlvd. lb. .15 - —
l.c.l. dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
Methacrylate, dms., c.l., and truckload, frt. equald., with Belle, W. Va., and Arlington, N. J lb. .36½- —
smaller lots, same basis lb. .37 - —
tanks same basis lb .35 - —
Naphthyl ketone, cryst., cns lb. 3.60 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline chloride, NF tib dms. lb. 5.44 - —
Salicylate, USP, cns., 50-lb. lots lb. .58 - —
Testosterone, USP, 100-gram bots. gram. .79 - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .47½- —
l.c.l., works lb. .48 - —
tanks, works lb. .46 - —
Methylene blue, fib, dms., 100-lb. lots, frt. adjusted lb 3.25 - 3.60
smaller lots same basis lb 3.40 3.60
Chloride, indust., dms., c.l., dlvd. E. lb. .13½- —
Methylionone, A, cns lb. 6.55 - 8.80
D, cns lb. 7.50 - 9.55
prime, cns lb. 4.55 - 6.40
standard, dms., cns lb. 3.80 - 4.65
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylparaben (see Methyl parahydroxybenzoate).
Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone (see 1-Phenl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼- —
l.c.l., ex-whse or frt. alld. E lb. .07 - —
paint, or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
l.c.l. ex-whse or frt. alld. E lb. .08½- —
rubber, bgs. c.l., works, frt. alld. E lb. .07½- —
l.c.l., ex-whse or frt. alld. E lb. .08½- —
wallpaper, bgs., c.l., works, frt. alld., E lb. .07¾- —
l.c.l. ex-whse or frt. alld. E lb. .08¼- —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
l.c.l., ex-whse or frt. alld. E lb. .08½- —
Mica, wet-grd. W. of Miss R. ½c. higher. W of Rockies, 1c. higher
Milk powder non-fat, roller, bgs., c.l. lb. .12 - .1535
spray, bgs., c.l. lb. .14 - .1610
Milk powder, whole, roller, bgs., c.l. lb. No prices.
spray, bgs., c.l. lb. .27 - .31
Sugar (see Lactose).
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .09¾- .10
New York gal. .11½- —
Molybdenum (metal), powd., 80 or 200 mesh, ctns., works kilo. 8.80 - —
Trioxide, pure, kgs., works, basis Mo. content lb. 1.35 - —
tech., kgs., works, basis Mo. content lb. 1.25 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene dms., c.l., frt. alld. or dlvd. E lb. .11½- —
l.c.l., same basis lb. .12½- —
tanks, same basis lb. .10 - —
Monochlorobenzene prices in the West, 1¾c higher.
Monoethanolamine, dms., c.l., dlvd. E lb. .26¾- —
l.c.l., same basis lb. .27¾- —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd E lb. .33 - —
l.c.l., dlvd. E lb. .34 - —
tanks, dlvd. E lb. .31 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylortnotoluidin (see N-Ethyl-o-toluidine).
Monoisopropylamine dms., c.l., dlvd. lb. .30¼- —
l.c.l., same basis lb. .31½- —
tanks, same basis lb. .28½- —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald., 100% basis. lb. .40 - —
l.c.l., frt. equald, 100% basis. lb. .40½- —
tanks, frt. equald, 100% basis. lb. .31 - —
40% soln., dms., c.l., frt. equald. 100% basis lb. .37 - —
l.c.l., frt. equald. 100% basis lb. .37½- —
tanks, frt. equald., 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine cns oz. 12.40 -12.60
Acetate, anhyd., cns oz 9.95 -10.00
Hydrobromide, cns oz 9.90 9.95
Hydrochloride, NF, cns oz 9.90 9.95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine dms., c.l., dlvd. E lb. .34¾ —
l.c.l. dlvd. E lb. .35¾- —
tanks, dlvd. E lb. .32¾- —
Musk, nat., Tonquin grains, bots. oz. No stocks.
syn., ambrette, 100-lb. lots, fib. dms. lb. 5.15 - —
25-lb. lots, cns lb. 5.20 - —
5-lb. lots, cns lb. 5.30 - —
ketone, 100-lb. lots, fib. dms. lb. 5.30 - —
25-lb lots. cns lb 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xyiol, 100-lb. lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5 lb lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb. .12 - .12½
Dutch, yellow, bgs lb. No prices.
English, yellow, bgs lb. .12 - .12½
Montana, oriental, bgs. lb. No prices.
yellow, bgs. lb. .12½- .13
Myrobalans, J-1, assorted, bgs., ex dock ton. 54.00 - —
crushed, bgs., ex dock ton. 63.00 -65.00
ordinary, bgs., ex dock ton. 43.00 - —
extract, Indian, solid, 55% tannin, bgs., exdock, plus duty lb. .07¼ Nom.

N

Naphtha, painters (see Petroleum naphtha V M. & P.).
Solvent (see S).
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .05½- —
78°, bgs., c.l., same basis lb. .06¾- —
l.c.l., same basis lb. .07 - —
tanks, same basis lb. .06¼- —
imp., 78°, large lots lb. .05¾- .06
refd., dom., indust., chipped or crushed, bgs., frt. equald lb. .11½- —
flake, bgs., same basis lb. .12½- —
tanks, same basis lb. .10¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .13¾- —
cs., 50 lbs., c.l., same basis lb. .14 - —
1-lb. pkgs. c.l. same basis lb. .16¼- —
a-Naphthol, bbls., frt. alld lb 1.00 - —
b-Naphthol, resub., dms., works lb. .78½- —
tech., bbls., c.l., works lb. .32½- —
l.c.l., works lb. .34½- —
Benzoate, fib. dms., works lb. 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate, dms lb. 5.00 - —
Sulfate, cns lb. 35.00 - —
a-Naphthylamine, bbls., frt. alld lb 50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb 7.00 8.00
Neomycin, fib, dms., 100-kilo lots, basis, activity gram. .60 - —
1-kilo lots, basis, activity gram. 1.20 - —
Nerolin, cns lb. 2.45 - 2.65
Niacin (see Acid, nicotinic).
Niacinamide (see Nicotinamide)
Nickel acetate, bbls., dlvd lb. .77 - .90½
Carbonate, bbls., dlvd lb. .73¾- .81¾
Chloride, bbls., dlvd lb. .38½- .46½
Formate, bbls., ton lots, frt. alld. lb. .68 - .69
Metal, electro cathodes, cs., works. lb. .64½- —
Nitrate, bbls., works lb. .37 - .38
Oxide, black, bbls lb. .76 - —
green, bbls lb. .76 - —
Sulfate, bgs., c.l., dlvd lb. .30¼- —
l.c.l., dlvd lb. .31½- .38¼
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride, dms., frt. adjusted. kilo. 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs lb. .11½- .12
Nikethamide, cbys lb. 5.75 6.00
m-Nitroaniline, dms., frt. alld lb. 1.05 - —
o-Nitroaniline, flaked, dms lb. .54 - .57
powd., dms lb. .60 - —
p-Nitroaniline, dms., l.c.l., frt. alld. lb. .51½- —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 - —
l.c.l., frt. alld lb. .13 - —
tanks, frt. alld lb. .11 - —
o-Nitrobiphenyl, tech., dms., c.l., works lb. .14½- —
l.c.l., works lb. .15 - —
tanks, works lb. .13 - —
Nitrocellulose, ester-soluble, 20-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½ sec., bbls., c.l., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43

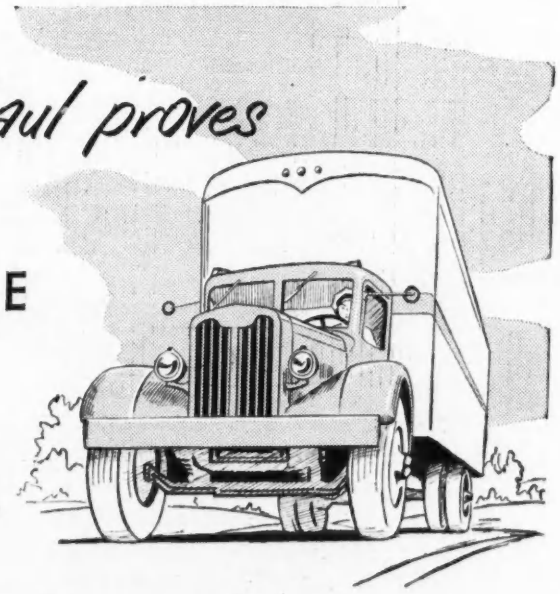
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms lb. .20 - .21
p-Nitrochlorobenzene, dms lb. .26 - .27
2-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms., dlvd. E of Rockies lb. .25 - —
Nitrogen solution, tanks, frt. equald, 37-40.8% N, 100% basis ton. 130.00 - —
Nitrogenous process tankage, bulk, works unit-ton. 5.00 - —
Sewage sludge, bulk, works unit-ton. 2.95 + .50
Nitromethane, dms., l.c.l., dlvd E. of Rockies lb. .25 - —
a-Nitronaphthalene, bbls, frt. alld. lb. .41 - —
Nitropropane 1, dms., dlvd. E. of Rockies lb. .23¼- —
2, dms., dlvd. E. of Rockies lb. .25 - —
l.c.l., works lb. .24¾- —
tanks, works lb. .22¾- —

1,000-mile road haul proves

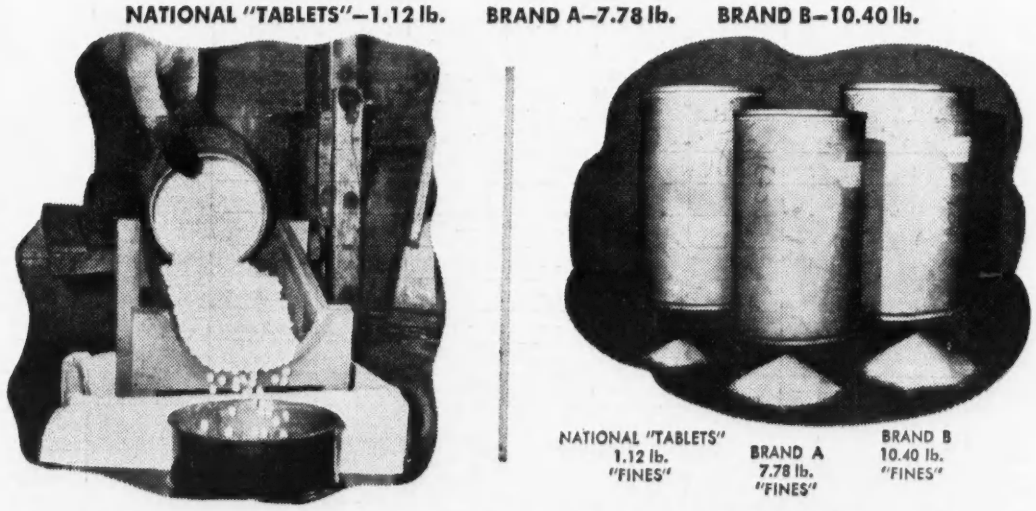
NATIONAL MALEIC ANHYDRIDE TABLETS

contain 75-90% less fines "as delivered"



By truck from producing points to Buffalo, to Chicago and back to Buffalo again went drums of three manufacturers' Maleic Anhydride. Then the contents of each drum were carefully screened and the 2 mesh "fines" weighed. Here's what the scales showed:

NATIONAL "TABLETS"—1.12 lb. BRAND A—7.78 lb. BRAND B—10.40 lb.



NATIONAL "TABLETS" 1.12 lb. "FINES" | BRAND A 7.78 lb. "FINES" | BRAND B 10.40 lb. "FINES"

We knew our new Moundsville plant was making exceptionally good-to-look at, easy-to-handle Maleic Anhydride. We knew our new tablet form resists degradation in shipping and handling. But, frankly until now we didn't fully realize how downright all-around good National Maleic Anhydride Tablets really are. There's no price premium on this premium quality product. So why not have the advantages of uniform, quick-dissolving, safer-to-handle National Maleic Anhydride Tablets by sending your next order to our nearest office?

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK 6, N. Y.

Boston Providence Philadelphia Chicago San Francisco Portland, Ore. Greensboro Charlotte Richmond Atlanta Los Angeles Columbus, Ga. New Orleans Chattanooga Toronto

NATIONAL QUALITY

Allied Chemical

o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., works, frt. equald lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 - —
l.c.l., frt. alld. lb. .11 - —
tanks, frt. alld. lb. .09 - —
p-Nitrotoluene, dms., works. lb. .33 - .36
m-Nitro-p-toluidine, dms. lb. 1.59 - —
Nitrous ether, conc., bots. 100-lb. lots lb. 1.28 - 1.35
Nonyl phenol, dms., c.l., frt. alld. lb. .26 - —
l.c.l., frt. alld. lb. .27 - —
tanks, frt. alld. lb. .24 - —
Nutgalls, Aleppo, bgs. lb. .38 - —
Chinese, bgs lb. .45 Nom.
Nutmeg, East Indian, whole bgs. lb. .46 - —
shrivels, bgs. lb. .44 - —
West Indian, bgs. lb. .33 - .33½
Nux vomica, bbls lb. .10 - .12
powd., bbls., bxs. lb. .15 - .17

O

Octane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .23¼- —
l.c.l., works lb. .23¾- —
tanks, works lb. .22½- —
Drum prices for octyl phenol are 1c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns. lb. 2.80 - 3.25
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.P.A., bots. lb. 3.00 - 3.40
NF, bots. lb. 3.25 - 3.75
sweet, USP, dms., cns. lb. .55 - .90
Allspice (see Oil, pimento).
Amyris, dms. lb. 1.40 - 1.85
Angelica root, bots. lb. 66.00 -100.00
seed, bots lb. 56.00 -95.00
Aniline (see A).
Anise, USP, dms. lb. 3.50 - 5.00
Apricot, kernel, USP, dms. lb. .45 - .50
Avocado, cns. lb. No stocks.
Babassu, crude, tanks lb. No stocks
Bay, NF Puerto Rican, 50-55%, cns lb. 1.55 - 2.00
55-60%, cns lb. 1.90 - 2.25
West Indian, 50-55%, cns., dms. lb. 1.45 - 2.25
Bergamot, nat., NF, Italian, cns. lb. 10.50 -13.00
Birchtar, crude, cns. lb. 1.50 - 1.90
rectified, NF, cns lb. 2.00 - —
Bois de rose, Brazil, dms. lb. 4.50 - 6.00
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns. lb. 1.75 - 2.10
redist., USP, cns. lb. 2.25 - 3.00
Calamus, bots lb. 12.00 -20.00
Camphor, sassafrassy, dms. lb. .38 - .55
white, dms. lb. .31 - .45
Cananga, native, cns. lb. 7.85 -10.25
rectified, cns. lb. 12.50 -14.75
Caraway, NF, cns. lb. 3.25 - 5.00
Capsicum (see Capsicum oleoresin).
Cardamom, NF, bots. lb. 36.00 -50.00
Cassia, USP (see Oil, cinnamon, USP).
Castor, blown, dms., c.l. lb. .20 - —
l.c.l. lb. .2150- —
dehydrated, bodied, dms., c.l. lb. .2260- —
l.c.l. lb. .2310- —
tanks lb. .2160- —
unbodied, dms., c.l. lb. .2110- —
l.c.l. lb. .2160- —
tanks lb. .2010- —
hydrogenated, bgs., l.c.l. lb. .2350- .2450
No. 3, tech., dms., c.l. lb. .1775- —
l.c.l. lb. .1825- —
tanks lb. .1675- —
No. 1, Brazilian, tanks lb. .14½- —
sulfonated, 50%, dms., l.c.l. lb. .13½- .14
75%, dms., l.c.l. lb. .17 - .17½
USP, dms., c.l. lb. .1800- —
l.c.l. lb. .1850- —
tanks lb. .1700- —
refd. and deodorized, dms., c.l. lb. .1950- —
l.c.l. lb. .20 - —
tanks lb. .1850- —
Cedarleaf, cns., dms. lb. 2.65 - 3.00
Cedarwood, cns., dms. lb. 1.00 - 1.65
Celery seed, bots. lb. 13.00 -21.00
Chamomile, blue, Hungarian bots. lb. 160.00 -250.00
Chinawood (see Oil, tung).
Cinnamon bark, bots. lb. 25.00 -50.00
leaf, cns. lb. 1.75 - 2.25
USP, cns., dms., (Cassia) lb. No stocks.
Citronella, Ceylon, cns., dms. lb. 1.20 - 1.75
Java, true, dms. lb. 1.60 - 2.00
Java-type, cns. lb. 1.60 - 2.00
Clove, buds, USP, cns., dms. lb. 3.25 - 4.20
leaf, unrectified, dms. lb. 1.55 - 2.20
Coconut, crude, tanks, N. Y. lb. .13¼ Nom.
Pac. Coast lb. .12 - —
refd., Cochin type, tax incl. ret. dms., l.c.l. lb. .21¾- —
deodorized tax incl. non-ret. dms., c.l. lb. .23½- —
Cod, Newfoundland, dms. lb. .09¼- .09½
Codliver, USP, dms. gal. 1.50 - 1.60
Copaiba, cns lb. 1.70 - 2.50
Coriander, USP, bots lb. 14.50 -18.00
Corn, crude, tanks, works lb. .13⅛- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05½ Nom.
refd., salad, dms. lb. .18 - .18¼
tanks lb. .16⅝- —
Costus, bots. lb. 8.00 - —
Cottonseed, crude, tanks, South-East lb. .12⅞- —
Valley lb. .12¾- —
Texas lb. .12⅜ Nom.
foots (soapstock), acid 95%, tanks, N. Y. lb. .05½ Nom.
raw, 50%, tanks, same basis. lb. .02⅜- —
refd., salad, dms. lb. .18⅛- .18½
tanks lb. .16⅜- —
Creosote (see Creosote, coaltar).
Crude (see Petroleum, crude).
Cubeb, cns lb. 4.50 - 6.00
Cumin, bots., cns. lb. 4.15 - 5.75
Cypress, bots. lb. 5.30 - —
Degras (see D).
Dillseed, bots. lb. 2.80 - 4.25
Dillweed, dom., bots., dms. lb. 3.75 - 5.30
Dip (see D).
Erigeron, cns. lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, dms. lb. .67 - 1.00
80-90%, dms. lb. .85 - 1.25
Fennel, sweet, USP, cns. lb. 2.30 - 3.25
Fir, Canada, cns. lb. 2.35 - 3.00
Fish, refd., alkali, dms. lb. .1400- .1450
kettle-bodied, dms. lb. .1630- .1680
light-pressed, dms. lb. .1250- .1300
tanks lb. .1100- —
Fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gram, dms., 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gram, dms., 1,000,000 units .10½- .11
Oil, fishliver, crude, for feeds or centrating 100,000 A units per gram., dms., 1,000,000 units. .12 - .14
200,000 A units per gram, dms 1,000,000 units. .12 - .14
300,000 A units per gram, dms. 1,000,000 units. .12 - .14½
400,000 A units per gram, dms., 1,000,000 units. .12 - .14½
500,000 A units per gram, dms 1,000,000 units. .12 - .14½
Prices above are based on the USP XIV method of conversion, Morton-Stubbs Corrected E = 1909.
Fusel (see F).
Garlic, pure, bots. oz. 6.50 - 9.50
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns. lb. 10.50 -12.25
Bourbon, cns. lb. 11.25 -14.50
Turkish (see Oil palmarosa)
Ginger, dist., bots. lb. 12.25 -17.50
Grapefruit, dms. lb. 2.50 - 3.25
Grease, No. 1, dms. lb. .14½- .15
extra, winter, strained, dms. lb. .17½- .18
prime, burning, dms. lb. .19 - .19½
Guaiacwood, cns lb. 1.40 - 1.90
Hemlock, cns. lb. 2.70 - 3.80
Juniper berry, NF, VIII, bots lb. 2.75 - 4.00
twice rectified, bots. lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns. lb. .42 - .65
Lard (see Oil, grease).
Laurel leaf, dms. cns. lb 9.75 -12.50
Lavandin, dms., cns lb. 2.50 - 4.85
Lavender, flower, USP, French, 30-32% ester, cns lb. 3.55 - 4.60
38-40% ester, cns lb. 9.50 -13.20
40-42% ester, cns. lb. 10.00 -16.50
Spike, Spanish, cns lb. 1.85 - 2.30
Lemon, USP, Calif., cns., dms. lb. 4.60 - 6.15
Messina, cns. lb. 6.05 - 9.25
terpeneless, bots lb. 32.00 -85.00
Lemongrass, cns., dms. lb. 2.65 - 3.25
Oil, lignaloe wood, Mex., cns. lb. 3.70 - 4.50
Lime, dist., Mexican, cns. lb. 3.25 - 5.00
West Indian, cs lb. 3.50 - 5.00
expressed, West Indian, cns lb. 7.50 - 8.50
terpeneless, bots lb. 29.50 -100.00
Linseed, raw, dms., c.l., N. Y. lb. .1505- —
l.c.l. lb. .1555- .1575
tanks, f.o.b. Minneapolis lb. .1230- —
New York lb. .1355- —
tankwagon, New York lb. .1385- —
Boiled linseed oil, .006c. per lb. higher.
Mace, dist., cons., dms lb. 2.75 - 3.60
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic Coast lb. .08½ Nom.
Gulf and Atlantic ports, f.a.s. lb. .09¼ Nom.
Mineral, white (see Oil, white mineral)
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. lb. .18 Nom.
synthetic, cns., dms lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms lb. .33 - .34
20° cold test, dms. lb .32 .33
30° cold test, dms. lb 30 31
Neroli, NF, French, bots. lb. 85.00 -275.00
Spanish, bots lb. 35.00 -85.00
Nutmeg, USP, dist., East Indian, cns., dms lb. 2.75 - 3.35
West Indian, cns., dms lb. 2.60 - 2.85
Ocotea, cymbarum, dms. lb. 1.10 - 1.50
Oiticica, liquid, dms. lb. .16¼- .16¾
tanks lb. .14¾- .15
Oleo, extra, dms. lb. .16½- .16¾
Olibanum, bots. lb. 5.50 - 7.65
extra fine, bots lb. 8.00 - —
Olive, Spanish, edible, dms., duty paid gal. 2.35 - 2.45
Tunisian, same basis gal. 2.25 - 2.30
Oil, orange, sweet, dist., cns. lb. .40 - .50
expressed, USP, Brazilian, cns., dms lb No stocks
Calif., cns., dms. lb. .60 - 1.25
Florida, cns., dms lb. .45 - 1.25
Messina, cns lb. 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.65
sesquiterpeneless, bots lb. 65.00 -120.00
Origanum, Spanish, cns lb. 1.75 - 2.85
Palm, clarif., dms lb. .12¾- .13
kernel, denat., tanks lb. .13 - —
Palmarosa, cns. lb. 8.00 - 9.50
Paraffin, pale, 100-110 vts., at 100° F tanks, East Coast refy gal. .14 - —
Patchouli, dms lb. 8.00 - 9.50
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .18 - —
refd., dms. lb. .23¾- .24
tanks lb. .22¼ Nom.
Pennyroyal, USP, imported, cns lb. 1.90 - 2.50
Peppermint, nat., dms lb. 7.75 - 8.90
redist., USP, dms lb. 8.10 - 9.50
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms lb. 4.00 - 5.30
Pimento, berry, NF, dms lb. 4.20 - 7.50
leaf, cns. lb. 2.55 - 3.10
Pine, dest-dist., dms., l.c.l., works. lb. .11¼- —
ex-whse. lb. .1355- —
steam dist., dms., ex whse., N.Y.C. lb. .163 - —
Pineneedle, Siberian (See Oil, abies siberica).
Rapeseed, tankcars lb. .17 - —
Red (see Acid, oleic)
Rice bran, clarif., dms., l.c.l. lb. .17½- —
tanks, dlvd, E lb. .15½- —

How does the champion get to be champion?

By being better! Unmatched through the years is the *California flavor* that distinguishes Exchange Brand Oil of Lemon. That's why Exchange remains the overwhelming sales leader—in fact, the *4-to-1 favorite* over all other lemon oils combined!

So why skimp on quality...insist on Exchange quality and flavor that come *only* from genuine California lemons, grown and skillfully processed by Sunkist Growers.

Sunkist Growers
PRODUCTS DEPARTMENT • ONTARIO, CALIFORNIA

Produced by Exchange Lemon Products Co. • Corona, California

Distributed in the U.S. exclusively by
FRITZSCHE BROTHERS, INC.
76 Ninth Ave., New York 11, N.Y.
DODGE & OLCOTT, INC.
180 Varick St., New York 14, N.Y.

Exchange®
OIL OF LEMON U. S. P.

Oil, Rose—Pentane

Oil, rose, nat., Bulgarian, bots...oz. 43.50 - 62.25
Rosemary, Spanish, USP, cns., dms lb. .60 - 1.00
tech., cns., dms lb. .50 - .70
Rue, bots lb. 1.65 - 2.30
Safflower, dms., c.l., Atl. coast lb. .1910- —
tanks, same basis lb. .1760- —
Sage, clary, bots lb 20.00 -25.00
Dalmatian, cns. lb. 5.50 - 7.20
Spanish, cns. lb. 1.15 - 1.40
Sandalwood, NF, cns lb. 11.50 -13.00
Sardine, crude, tanks, Pac. coast lb. .08½ Nom.
Sassafras, artif., dms lb. .90 - 1.25
nat., Brazilian (see Oil ocotea cymbarum).
dom., USP, cns., dms lb. 1.75 - 2.20
Savin, cns. lb. 2.75 - —
Savory, cns lb. 4.25 - —
Sesame, refd., dms lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works lb. .33 - —
l.c.l., works lb. .35 - —
tanks, works lb. .23 - —
Snakeroot, Canada, cns lb. 28.50 -31.00
Soybean, crude, tanks, Decatur lb. .12 - —
foots (soapstock), acid 95%, tanks, N. Y. lb. .06 - —
raw, 50%, tanks, N. Y. lb. .02½- —
refd., alkali, dms. lb. .16½- .16⅝
tanks lb. .14½- —
clarified, dms. lb. .13½- .16⅛
tanks lb. .14 - —
salad, dms. lb. .16⅝- .17⅛
tanks lb. .15 - —
Spearmint, USP, dms lb. 4.00 - 5.50

Oil, sperm, bleached winter, 45° dms lb. .1625- .1650
tankcars lb. .1450- —
nat., winter, 45°, dms lb. .1525- .1550
tankcars lb. .1350- —
Spruce, cns., dms lb. 2.10 - 2.75
Sweet birch, USP, Nortnern, cns. lb. 4.25 - 9.50
Southern, cns lb. 2.50 - 3.00
Tall, crude, dms., c.l., works lb. .03¼- —
tanks, works lb. .02¼- —
dist., dms., c.l., works lb. .07¼- .07½
tanks, works lb. .06 - —
refd., dms., c.l., works lb. .06¼- —
l.c.l., works lb. 06½- —
tanks, works lb. .05 - —
Tallow, acidless, dms lb. .12½- .13
Tangerine, Floridian, dms lb. 2.75 - 5.35
Tansy, dms. lb. 7.75 - 9.00
Tar Acid (see T's).
Pine, coml., dms., c.l., works lb. .528 - .538
l.c.l., works lb. .601 - —
whse. lb. .712 - —
tanks, works lb. .427 - .438
rectified, NF, dms., incl. l.c.l., works, South lb. .77 - —
whse., N.Y.C. lb. .87 - —
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms lb. 1.70 - 3.75
white, cns. lb 1.95 4.00
tech., white, cns lb. .40 1.85
Tung, dms., c.l., N.Y. lb. .23¾- —
l.c.l., same basis lb. .24¼- .24½
tanks, N. Y. lb. .22¼- .22½
domestic mills lb. .22 - —
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns, dms lb 40 45
Vetiver, Bourbon, cns lb. 13.25 -17.00
Haitian, cns lb. 11.80 -21.00
Java, cns. lb. 22.50 -40.00
Wheat germ, 5-gal. dms gal. 10.00 -13.00

Oil, white mineral, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. N. Y. gal. .81½- .84½
65-75 vis., non-ret., dms., c.l., same basis gal. 82½- .85
l.c.l., same basis gal. .87½- .88½
80-90 vis., non-ret., dms., c.l., same basis gal. .83½- .86½
l.c.l., same basis gal. .88½- .89½
125-135 vis., non-ret., dms., c.l., same basis gal. .89½- .92½
l.c.l., same basis gal. .94½- .95½
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - .68½
l.c.l., same basis gal. .71 - .71½
175-185 vis., non-ret., dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½- .75
l.c.l., same basis gal. .77½- .78
345-355 vis., non-ret. dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed, cns. lb. 5.00 - 8.00
Wormwood, cns. lb. 5.00 - 6.85
Ylang-ylang, Bourbon, bots lb. 17.00 -30.00
extra, bots lb. 28.00 -40.00
Madagascar, bots lb. No stocks
Oleostearine, bbls. lb. .12½- .12¾
Opium, USP, cns lb. 19.20 -19.45
gran., USP, cns lb. 21.65 -21.90
powd., USP, cns lb. 21.65 -21.90

Orange, cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.56 - —
Chrome, CP., bbls., dlvd. N of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .31 - —
Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport), 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., 1½c. El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner lb. 1.30 - —
Mineral, American, bbls, l.c.l., works lb. .2035- .2060
Molybdated, bbls lb. .45 - —
o-Nitroaniline toner, kgs lb. 1.15 - —
Orange peel bitter, Haitian, bls lb. .14 - .16
sweet, bls lb. .16 - .18
Orris root, Florentine, bls lb. .45 - .50
powd., bbls., bxs lb. .50 - .53
Verona, bls lb. .35 - .40
powd., bbls., bxs lb. .40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see 2-Nitro-4-chlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine).
Orthophenetidin (see o-Phenetidine).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage orange, cryst., No. 1, bbls., l.c.l lb. .40 - —
extract, liq., No. 1, bbls., l.c.l lb. .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
smaller lots, works lb. 4.92 5.17

P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more lb. 4.00 - —
Pancreatin, USP, bots lb. 1.90 - 2.10
Papain, USP, African, bots lb. 4.00 - 4.50
Ceylon lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25 oz. to 100 oz. lots oz. 5.00 - —
smaller lots oz. 5.05 - 5.20
Sulfate, cns. oz. 7.10 - 7.35
Paprika, Roumanian, bgs lb. .31 - .33
Spanish, bgs. lb. .36 - .38
Yugoslavian, bgs. lb. .36 - —
Para-anisidin (see p-Anisidine).
Para-acetylaminobenzaldehyde thiosemicarbazone (see p-Acetylaminobenzaldehyde thiosemicarbazone).
Para-aminophenol (see p-Aminophenol).
Paracnloroanilin (see p-Chloroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachloro-orthonitroanilin (see 4-Chloro-2-nitroaniline).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale white, 121°-123°F, ASTM, solid, c.l., refy lb. .0710- —
fully refd., 122°-124°F, ATSM, slabs loose, c.l., refy lb. .0845- —
125°-127°F, ASTM, slabs loose, c.l., refy lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., refy lb. .0855- —
132°-134°, ASTM, slabs, loose, c.l., refy lb. .0855- —
135°-137°F., ASTM, slabs loose, c.l., refy lb. .0855- —
Prices for paraffin in bags and cns., c.l. 7/10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher and under 1,000 lbs., 3.7c. per lb. higher
AMP temperatures are an arbitrary 3° F. higher than ASTM.
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .0965- —
l.c.l., frt. alld lb. .1165- .1265
powd., bgs., c.l., frt. alld lb. .15½- —
l.c.l., frt. alld lb. .17 - —
USP X, fib. dms., c.l. lb. .183 - —
1,000-lb. lots lb. .193 - —
smaller lots lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l. works lb. .13½- —
l.c.l., works lb. .14½- —
tanks, works lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see 4-Nitro-2-chlorobenzene).
Paranitrophenol (see p-Nitrophenol).
Paranitrotoluene (see p-Nitrotoluene).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15%, dealers, dms., works lb. .48 - .49
tech., dms., c.l., t.l., works lb. 1.3395- —
l.c.l., works lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paratoluidine (see p-Toluidine).
Paris green, dealer, distributor, dms., c.l., works, frt. alld. on 96 lbs. or over lb. .36 - .40
l.c.l., same basis lb. .37 - .53
Passion flower herb, bls lb. .20 - .21
Peanut meal, 45%, old process, bgs., mills ton. 84.00 Nom.
Pectin, citrous, NF, powd. bbls lb 2.05 - 2.06
tech. powd. bbls lb 1.50 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .07½- .08
Procaine, bulk, 1,000,000 units. .07½- .08
Sodium, sterile, bulk, 1,000,000 units. .07½- .08
Pentachlorophenol, dms., c.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .24 - .29
truckload, 20,000 lbs. min. same basis lb. .21¼- —
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, industrial, tanks, Tex, refy. gal. .14¼- —

USI TO MARKET

"PETROTHENE"*—high molecular weight polyethylene will be available in April from the new unit now being constructed by National Petro-Chemicals Corporation at Tuscola, Illinois. This completely integrated operation starts with natural gas as the source of ethane which is converted into ethylene in the world's largest petrochemical plant.

polyethylene

FROM PETRO

"PETROTHENE" will be available in all quantities from 50 pound bag to carload through the nation-wide sales facilities of U. S. Industrial Chemicals Co. and will be warehoused at strategic locations for prompt delivery.

"PETROTHENE" will be available in several grades specifically designed for use in film, bottles, pipe and injection molding.

Please write for new "PETROTHENE" booklet which will be available shortly.

*Application has been filed in the U. S. Patent Office for registration of "PETROTHENE" as the Trade Mark for high molecular weight polyethylene produced by National Petro-Chemicals Corporation, a joint enterprise of National Distillers Products Corporation and the Panhandle Eastern Pipeline Company.

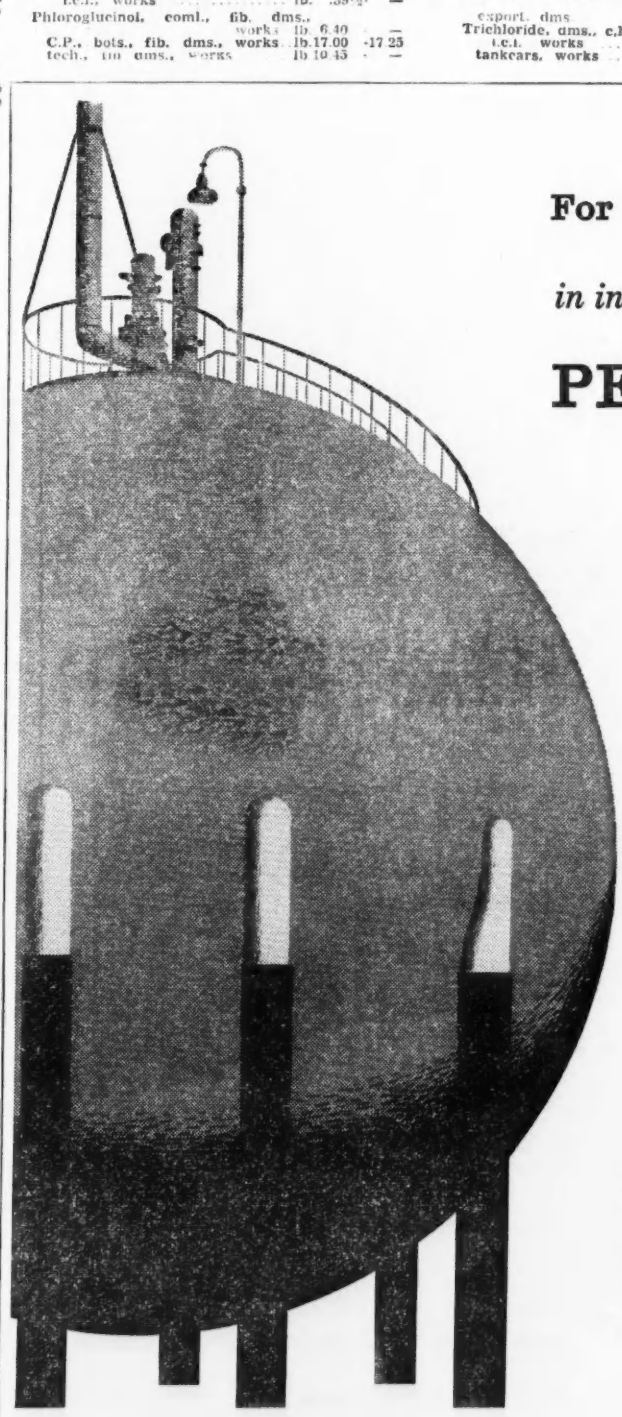
U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
99 Park Avenue, New York 16, N. Y. Branches in principal cities

Pepper, black, Malabar, spot, bgs lb. .44 - —
red, Gondar, spot, bgs lb. .28 - .30
Japanese, hontaka, bgs lb. .33 - .34
birdseyes, bgs., new crop lb. .55 - .56
Mombasa, bgs., shipt lb. .30 - —
Nigerian, bgs. lb. .32½ - —
Turkish, bgs. lb. .20 - —
white, bgs. lb. .65 - —
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls lb. 1.25 - —
Pepsin, NF, 1:3,000 bulk lb. 3.45 - 3.50
Perchloroethylene, dms., c.l., or truckloads, divd. E dm. 85.00 - —
divd. W dm. 88.50 - —
l.c.l., divd. E dm. 95.00 - —
divd., W dm. 98.50 - —
tanks, divd. E lb. .10¾ - —
divd. W lb. .11¼ - —
Peru balsam, dms lb. 1.50 - 1.75
Petrolatum, amber, dms., c.l., refy. lb. .05 - .05¾
l.c.l., divd lb. .06¾ - .07
tanks, refy lb. .03¼ - .04⅛
cream, dms., c.l., refy lb. .06¾ - .07⅛
l.c.l. divd lb. .05¾ - .06⅛
tanks, refy lb. .04⅜ - .05⅛
extra, amber, dms., c.l., refy. lb. .05¼ - .05⅝
l.c.l., divd lb. .07 - .07¼
tanks, refy lb. .02½ - .03⅛
USP, white, lily, dms., c.l., refy. lb. .06¾ - .07¼
c.l. divd lb. .06¾ - .07⅛
tanks, refy lb. .04¼ - .04⅝
snow, dms., c.l., refy lb. .07⅛ - .07¾
l.c.l., divd lb. .08¼ - .08⅝
tanks, refy lb. .05⅜ - .05⅞
soft, dms., c.l., refy lb. .06¾ - .07¼
l.c.l., divd lb. .08½ - .08¾
tanks, refy lb. .05 - .05⅜
yellow, soft, dms., c.l., refy. lb. .05¼ - .05⅝
l.c.l. divd lb. .05⅞ - .06⅛
tanks, refy lb. .03½ - .05⅜
Petroleum lacquer diluent, 150°-240°F., b.r., tanks, West Coast, ex tax, Los Angeles, gal. .169 - .204
East coast, N. J., N. Y. gal. .16 - —
Group 3, benzol-type gal. .14125 - .14625
toluol-type gal. .13125 - .13375
Mineral spirits, reg., tanks, California, ex tax, San Francisco gal. .164 - —
East coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .11875 - —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —
Odorless, tanks, ref'y, Watson, Calif. gal. .245 - —
Borger, Tex gal. .24 - —
Houston, Tex gal. .24 - —
Wood River, Ill. gal. .2625 - —
divd., N. J. gal. .32 - —
divd., N. Y. gal. .3512 - —
tankwagon, N. J., divd gal. .36 - —
N. Y., divd gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y. gal. .17 - —
Group 3 gal. .12875 - —
tankwagon, Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic)
V.M.&P., 225°-300°F. b.r., tanks, West Coast, Los Angeles, gal. .169 - —
Portland, Ore. gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash. gal. .175 - —
East Coast, N. J., N.Y. gal. .18 - —
Group 3 gal. .12875 - —
tankwagon, Boston gal. .205 - —
Chicago gal. .239 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, East Coast, N. J., N. Y., 205°-234° F., b.r., 38° 43°C., m.a.p. gal. .24 - .26
19°-30°C., m.a.p. gal. .19 - .30
272°-387°, b.r., 31°C, m.a.p., gal. .29 - —
27°-29°C, m.a.p gal. .29 - .31
19°C., m.a.p gal. .32 - —
310°-392°F. b.r., 30°-38°C. m.a.p. gal. .27 - .30
17°-19°C., m.a.p gal. .35 - .38
350°-425° F., b.r., 32°-35° C., m.a.p gal. .30 - .30½
25°C., m.a.p gal. .39 - —
18°-21°C., m.a.p gal. .35 - .42½
Rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 gal. .12875 - —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .12375 - —
Pennsylvania, western gal. .15 - —
Boston gal. .19 - —
Chicago gal. .289 - —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16 - .18¼
l.c.l. works lb. .17 - .18½
tanks, works lb. .14 - .16½
50-55% sulfonic content, non-ret. dms., c.l., works lb. .15½ - —
l.c.l., works lb. .16½ - —
tanks, works lb. .12½ - —
o-Phenetidine, dms., works lb. 1.00 - —
p-Phenetidine, dms., works lb. 1.00 - —
Phenobarbital, USP, dms., 100-lb. lots lb. 4.00 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 4.00 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt. alld. E. of Rockies lb. .15¾ - —
l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .14 - —
82-84% (cresol 16-18%), non-ret. drums, c.l., same basis lb. .15¼ - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13½ - —
39° or above, tar distilled, non-ret. dms., c.l., same basis lb. .17¼ - .17¾
l.c.l., same basis lb. .18 - .18½
tanks, same basis lb. .15½ - —
USP, syn., dms., c.l., frt. alld. lb. .17¾ - —
l.c.l., same basis lb. .18½ - —
tanks, same oasis lb. .16 - —
Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots. lb. 1.10 - —
smaller lots lb. 1.12 - 1.17
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .45 - —
over 2,100 lbs., same basis lb. .47 - —
less than 2,100 lbs., same basis. lb. .49 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)

Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots lb. 4.00 - 4.65
Phenylacetamide, 125-lb. dms., works lb. 1.10 - —
smaller dms., works lb. 1.15 - 1.10
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. dms., divd. E lb. 3.60 - —
smaller dms., divd. E lb. 4.00 - —
Phenyldiethanolamine dms. c.l., divd E. lb. .40 - —
l.c.l., divd E lb. .41 - —
m-Phenylenediamine, dms. frt. alld. lb. .90 - —
p-Phenylenediamine, redist., dms., works lb. 2.00 - —
tech., refd., dms., same basis lb. 1.10 - 1.35
Phenylethanolamine, dms., c.l., works lb. .69½ - —
l.c.l. same basis lb. .70 - —
Phenylethyl acetate, bots lb. 1.35 - 1.95
b-Phenylethylamine, dms., 1,000-lb. lots, works lb. 1.10 - —
smaller lots, works lb. 1.15 - 1.40
Phenylethylphenyl acetate, bots lb. 3.95 - 4.40
Phenylhydrazine base, CP, bots lb. 3.00 - 3.07
Hydrochloride, coml., kgs., works. lb. 1.75 - —
purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb. lots, divd. E lb. 1.70 - —
smaller lots, divd lb. 2.00 - —
o-Phenylphenol, dms., l.c.l., works lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .35 - —
l.c.l., works lb. .39½ - —
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
C.P., bots., fib. dms., works lb. 17.00 - 17.25
tech., tin dms., works lb. 10.45 - —

Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton. 43.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long ton. 4.60 - —
70-68%, b.p.l., c.l., same basis long-ton. 5.00 - —
72-70%, b.p.l., c.l., same basis long-ton. 5.65 - —
75-74% b.p.l., c.l., same basis long-ton. 6.65 - —
78-76%, b.p.l., c.l., same basis long-ton. 7.65 - —
The above prices are based on fuel oil at $2.15 per bbl. and labor at $1.28. The 3c. labor advance and 9c. fuel oil advance currently absorbed.
Phosphorus amorph., red, dms., t.l. lb. .43 - —
smaller lots lb. .44 - .45
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l. dms., works, frt. equald. lb. .21 - .21½
tanks, works, frt. equald lb. .17 - .19
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l. dms., works lb. .17 - —
tanks, works lb. .12½ - —
Pentasulfide, sond, dms., c.l., works lb. .11½ - —
l.c.l., dms. works lb. .13 - .13½
Pentoxide, dms., c.l., works lb. .13½ - —
l.c.l. works lb. .16½ - —
Phosphorus sesquisulfide, tins, cs., works lb. .29 - —
export, dms lb. .31 - .36
Trichloride, dms., c.l., works lb. .14 - —
l.c.l. works lb. .17 - —
tankcars, works lb. .12½ - —

Phthalic anhydride, ogs, c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19½ - —
Phthalimide, 97%-98%, dms., works, frt. alld lb. .65 - .70
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
a-Picoline, ret., dms., c.l., works, frt. equald lb. .43½ - —
l.c.l., works, frt. equald lb. .44 - —
b,g-Picoline, 5° dms., c.l., works. lb. .32½ - —
l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., c.l., works. lb 2.65 - —
Pilocarpine hydrochloride, NF, bots oz 5.25 - —
Nitrate, USP, bots., vials oz. 4.80 - 4.90
Pimento, Jamaican, bgs lb. .97 - .98
Mexican, bgs. lb. .81 - .82
Pink root, bs lb. 3.00 - 3.25
d-Piperazine hexahydrate, French Codex, bots kilo 8.00 - 8.50
Piperidine 98% dms. frt. equald lb 2.90 - 3.00
Piperonyl butoxide, dms., divd. E. lb. 4.50 - 5.05
Cyclonene, dms., dvid. E lb. 3.70 - 4.25
Pitch, coaltar, 140°-150°F, m.p. bulk, tanks, works ton. 35.50 - —
Cottonseed, raw, dms., works lb. .02¼ - .03
Linseed dms lb. .06 Nom.
Marine, dms. lb. .04¼ - .05
Petroleum (see Asphalt, petroleum)
Soybean dms. works lb .05 Nom.
Tall, dms., works lb. .03¾ - .04⅛
Plaster of Paris (see Gypsum).
Platinum metal, works oz. 82.00 - 84.00
Pleurisy root, bs lb. .43 - .50
Podophyllum resin, NF, dms lb. 11.95 - —



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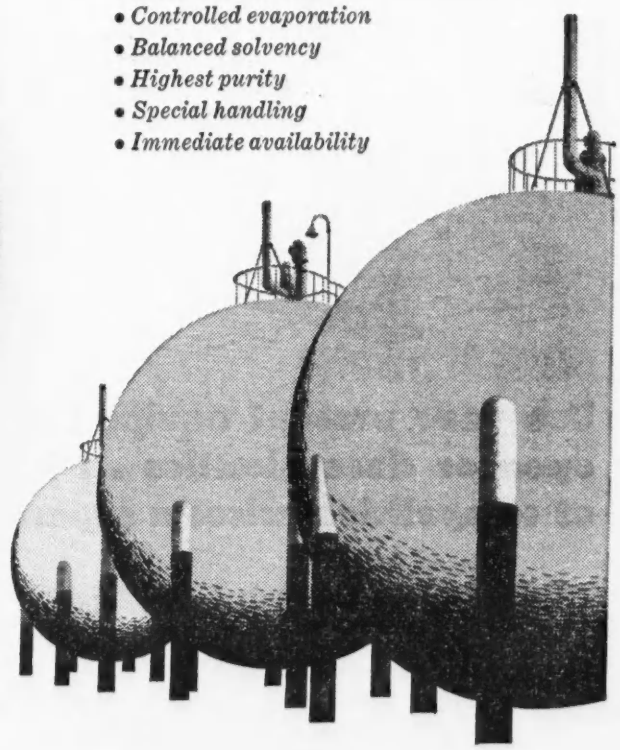

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Poke Root—Quebracho Extract

Poke root, bls ..... lb. .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb. lots, works. lb. .43 - —
smaller lots, works .. lb. .46 - .48
Poppy seed, Argentine, bgs. .... lb. No prices.
Dutch, bgs. ..... lb. .31½- —
Polish, bgs. ..... lb. .31 - —
Turkish, bgs. ..... lb. .26 - .27
Potash, caustic, reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15
l.c.l., works 100 lbs 10.20 —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works 100 lbs 8.70 - —
l.c.l., works ... 100 lbs 9.75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP gran., dms lb 22 - —
powd. dms lb 24 - —
Bichromate, bgs., c.l., works lb. .15 - —
l.c.l., works ..... lb. 15½- —
Potassium bichromate in dms. ¾c. higher.

Potassium bitartrate, NF, dom., gran. or powd., bbls., 5,000 lbs. 1 shipt lb. .33½- —
dms., c.l. ..... lb. .33 - —
smaller lots ..... lb. .34 - .37
imp., kgs ..... lb. .25¾- .26
Bromate, bbls., 1,000 lbs. or more. lb. .50 - .52
25-200-lb. lots ..... lb. .55 - .57
Bromide, USP gran., bbls., kgs. lb. .34 - .35
Carbonate, tech., calcined, bbls., c.l., works 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
USP gran., bbls., dms lb. 16½- .18
powd., bbls., dms lb. .21 - .23
Chlorate, cryst., dms., c.l., works, bbl lb. .10¼- —
l.c.l., works .. lb. .11½- .12
powd., dms., c.l., works lb. .10¾- —
l.c.l., works lb. .12 - 12½
export, dms., New York lb. .12¾- .13½
NF gran., dms lb .30 .34
Chloride, USP, cryst., dms.... lb. .21 - .23
gran., dms lb 15 .17
powd., dms lb 24 .26
Chromate, tech., bgs ..... lb. .50 - .50½
Citrate, USP gran., dms .... lb. .41 - —
powd., dms ..... lb. .40½- .41½
Cyanide, dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb. lots ..... lb. .455 - —
smaller lots, works ..... lb. .465 - —
Dichromate (see Potassium bichromate).
Ferricyanide, drums, ton lots lb. .50 - —
Ferrocyanide, bgs., ton lots... lb. .22½- —
smaller lots ..... lb. .23 - —

Potassium fluoborate, fib. dms., c.l., works. lb. .30 - —
l.c.l., works ..... lb. .31 - —
Fluoride, dms., works ..... lb. .37 - .38
Gluconate dms ..... lb. .75 - .79
Glycerophosphate, 75% solution, cbys lb. 2.15 - 2.25
Guaiacolsulfonate, NF, dms .. lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms. 1 to 100-dm. lots lb. .28½- .33
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms ..... lb. 1.90 - 1.95
Manure salt 22% K_2O, bulk, mines unit-ton. .19 - —
Metabisulfite, gran., dms ..... lb. .20 - .21
powd. dms lb. .25 —
Muriate, dom., 50-60% K_2O, bulk, Carlsbad, N. M. unit-ton. .39½- .40½
50-51% K_2O paper bgs. carlots bad, N. M. ton 24.50 - —
Nitrate, cryst., bbls., 10,000-ton lots 100 lbs. 14.40 - —
smaller lots 100 lbs. 14.65 -14.90
gran., bbls., 20-ton lots 100 lbs. 9.75 - —
smaller lots 100 lbs. 11.10 -11.50
powd., bbls., 20-ton lots 100 lbs. 10.75 - —
100 lbs. 10.75 —
smaller lots ..... 100 lbs. 12.00 -12.50
NF, gran., dms ..... lb. .09¾- .11¾
Potassium nitrate in bags, 50c. per 100 lbs. less in kegs, $1 more.
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .32
Pentaborate, gran., bgs., c.l., works. ton. 189.00 - —
dms., ton lots, ex whse.... ton. 293.50 - —
smaller lots, ex whse.... ton. 298.00 - —
Powdered Potassium pentoborate, $10.25 per ton higher

Potassium perchlorate, dms., c.l., works. lb. .15 - —
l.c.l., works ..... lb. .16½- —
Permanganate, tech., dms., works. lb. .22½- .23½
USP dms. works lb. .24¾- .30¼
Persulfate, dms., 5-ton lots, works. lb. .18 - —
1-ton lots, works ..... lb. .20 - —
Phosphate, tetrabasic, bbls., works lb. .16½- .18½
Prussiate, red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass, bgs., c.l., works. 100 lbs. 17.00 - —
l.c.l. 100 lbs. 17.80 - —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms., or more, works 100 lbs 6.55 - —
tanks works 100 lbs. 5.45 - —
Silicate, tech., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.35 - —
l.c.l., 5 dms. or more, works 100 lbs. 6.50 - —
tanks, works 100 lbs. 5.00 - —
40.5° Be., 1:2.0, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs. 6.10 - —
Silicofluoride, bbls., works .... lb. .09 - .10
Stannate, dms., frt. alld. E ... lb. .65 - .716
Sulfate, agricultural, 49-51% K_2O, bulk, works ton. 35.00 - —
NF VII cryst. dms lb .31 .33
gran. dms. ..... lb. .18½- —
powder dms. ..... lb. .16½- .17
Sulfocyanide, NF, cryst. (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms. lb. .84 - .94
tech., works ..... lb. .77 - .79
Titanate, etrs., c.l., works ..... lb. .14 - —
5-ton lots, works ..... lb. .14½- —
1-ton lot or less, works .... lb. .14¾- —
Potassium-magnesium sulfate, bulk, works basis 40% K_2SO_4, 18% MgO ton. 13.05 - —
Potassium-sodium tartrate, NF, gran., powd., dms., c.l. lb. .35 - —
5,000-lb. lots ..... lb. .35½- —
smaller lots ..... lb. .36 - .41
Potassium-titanium fluoride, fib. dms., works lb. .39 .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 —
l.c.l., works ..... lb. .52½- .55
Pregnenolone, bots ..... gram. .60 - —
Acetate, bots ..... gram. .55 - —
Progesterone, USP, bots., 100 gram lots gram. .65 - —
Acetate, bots ..... gram. .70 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld. lb. 2.90 - —
100 lb lots ..... lb. 3.60 - —
Propane, indust., tanks, group 3. gal. .03½- .04
N. Y. Harbor ..... gal. .08½- —
n-Propyl acetate, dms., c.l., dlvd lb. .12¾- —
l.c.l., dlvd ..... lb. .13¾- —
tanks, dlvd ..... lb. .1075- —
Gallate, dms., 100 to 2,500-lb. lots works lb 3.90 4.40
p-Hydroxybenzoate, USP, dms lb. 2.30 -2.40
Thiouracil, bots., 50-kilo lots or more kilo 55.90 —
smaller lots ..... kilo. 53.10 -55.30
Propylene dichloride, dms., c.l., dlvd. E lb. .0845- —
l.c.l., same basis ..... lb. .095 - —
tanks, same basis ..... lb. .07 - —
Prices in West 1c. higher dlvd., on same basis.
Glycol, indust., dms., c.l., dlvd. E lb. .14¾- —
l.c.l., same basis ..... lb. .15¾- —
tanks same basis ..... lb. .13 - —
USP, dms., c.l., dlvd. E ... lb. .16¾- —
l.c.l., same basis ..... lb. .17¾- —
tanks, same basis ..... lb. .15 - —
Methyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., same basis ..... lb. .21 - —
tanks, same basis ..... lb. .18½- —
Oxide, dms., c.l., dlvd. E ..... lb. .17 - —
l.c.l., dlvd. E ..... lb. .18 - —
tanks, dlvd. E ..... lb. .15 - —
Psyllium seed, black, bgs ..... lb. .30 - —
blonde, bgs. ..... lb. .18 - .20
husks, bgs. ..... lb. .45 - .50
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
smaller lots .. lb. .03⅞- .04⅛
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs. ton lots lb. .04 - —
sun dried, coarse, bgs ton. lots lb. 02½- .04
fine bgs. ton lots .. lb. 02½ 04
purif., 20%, dms., works ... lb. 10.00 -10.10
Pumpkin seed, bgs ..... lb. .25 - .26
Pyrethrin, syn., (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins bbls works. lb. .45 - —
powd., 1.3% pyrethrins, bbls., works lb. .65 - —
liq. 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.35 - 8.55
100:1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal. 41.75 -42.75
oleoresin, dewaxed, 20%, dms., works lb. 9.80 - 9.90
purif., 20% dms., works ... lb. 10.00 -10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal. 2.77 - —
l.c.l., same basis ..... gal. 2.80 - —
refd., 2°, non-ret. dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .55 - —
Pyrites, Canadian, works long-ton. 3.00 - 5.00
Pyrocatechol (see Catechol).
Pyrogallol, NF ..... lb. 3.25 - 3.45
Pyroxylin, scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works ..... lb. .12 - —
mixed, mottled, dms., works. lb. .13 - —
shavings, amber, cs. works lb. No stocks.
mixed colors, dms., works lb. .11 - —
white, china, ivory, dms., works lb. .16 - —
dense, opaque, dms., works. lb. .12 - .15
translucent pastels, cs., works. lb. .14 - —
transparent colorless, dms., works lb. .25 - —
colors, dms., works ..... lb. .15 - —
USP, bots ..... lb. 9.50 - —

Q

Quassia chips ..... lb. 17 - —
Quebracho extract, clarif., grd., 70% tannin, bgs., c.l., lb. .16½- .16¾
liq., 35% tannin, bbls., works. lb. .08¼- —
solid., clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23/64- —
ord., 63% tannin, bgs., c.l., same basis. lb. .11 21/32- —

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U.S.I. CHEMICAL NEWS

Jan.-Feb. ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1955

NEW NATIONAL DISTILLERS' AMMONIA PLANT NOW ON STREAM

National Distillers Announces 3 Appointments In Chemical Division

Three appointments highlighting the integration of all National Distillers Products Corporation chemical activities into one division were announced this month by Dr. Robert E. Hulse, Director of the Chemical Division, and a Vice President of both National Distillers Products Corporation and of its subsidiary, National Petro-Chemicals Corporation.

Lee A. Keane, Vice President of U. S. Industrial Chemicals Co., Division of National Distillers Products Corporation, has been named Director of Chemical Sales, and will be in charge of the sales of all the corporation's chemical products.

Robert H. Cornwell has been appointed Director of Production, and will be responsible for production activities of all chemical plants of the corporation and its subsidiaries.

Dr. Stuart Schott has been named Director of Research, and will be in charge of the research division which will conduct research and pilot plant operations for the entire corporation and its subsidiaries.

New "Argon Grade" of Metallic Sodium Seen Key to New Metals

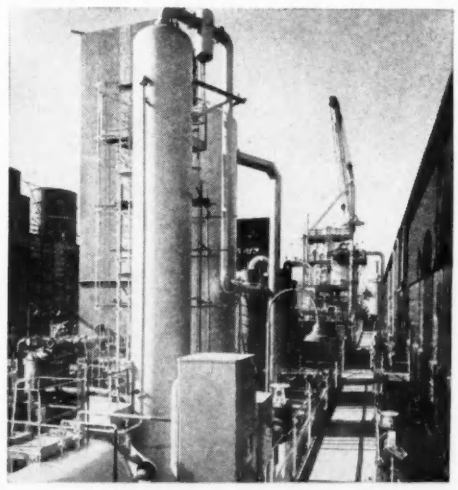
"Argon Grade" Metallic Sodium is a recently developed form of sodium which is produced, specially filtered and packed in an atmosphere of argon gas. Sodium protected in this manner is recommended for use where traces of dissolved gases such as oxygen and nitrogen are undesirable.

Development and commercial availability of this new product have been announced by the Chemical Division of National Distillers Products Corporation. This is the most recent step in National's program for developing forms and grades of metallic sodium which are easy to use and acceptable for a wide scope of industrial applications. Typical of this pioneering are earlier announcements on Sodium Dispersions and High Surface Sodium for many other uses.

For years the metal industry has benefited from the use of metallic sodium as a reaction tool. Used in an early commercial process for aluminum and more recently for rapid, efficient descaling operations in the production of stainless steel and other metals, sodium today points the way to new or improved methods for producing titanium, zirconium, silicon, tantalum, hafnium, etc. With the help of this versatile element, ductile metal and finely divided metal powder catalysts can be made from metal salts and oxides. For more information on adapting sodium to your needs, write Editor, U.S.I. Chemical News.

Capacity of 60,000 Tons Per Year to Help Meet Growing Needs of Midwest Agriculture, Industry

January 21 marked the opening of National Distillers' new $7 million synthetic ammonia plant at Tuscola, Illinois—the most recent step in National's long-range program of growth and development in the chemical field. This new plant which will produce ammonia from "off-gas" from a hydrocarbon cracking operation, is the largest of its kind in the United States. It will have a capacity of 60,000 tons of ammonia per year by mid 1955 and will produce anhydrous ammonia and a variety of nitrogen solutions for the expanding agricultural and industrial markets of the Midwest.



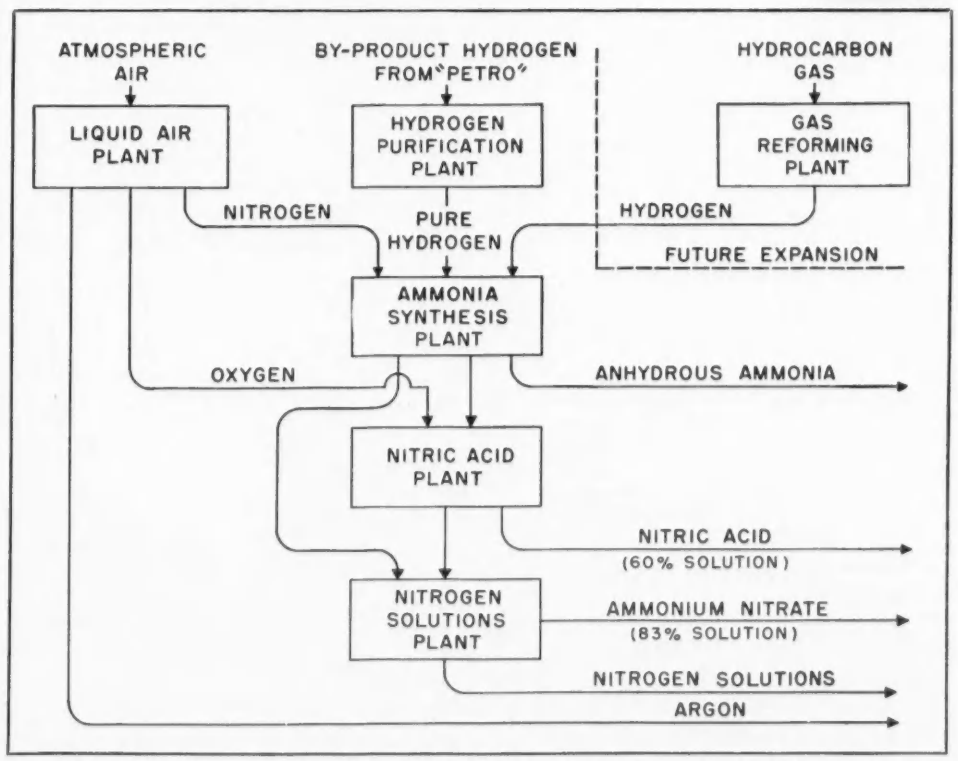
Shown here are the nitrogen wash column and the cold box of the air separation unit.

Uses By-Product Hydrogen

While hydrogen for most ammonia plants is obtained through "reforming" of natural gas, National Distillers has a ready-made source of supply — a hydrogen-rich "off-gas" from cracking operations at National Petro-Chemicals Corporation's ("Petro") huge ethylene plant located on adjacent property.

Nitrogen is obtained by air liquifaction and fractionation, with by-product oxygen being used in other processing operations. Studies by National's technical staff indicate that the use of by-product hydrogen is more economical than decomposition of natural gas from a standpoint of capital investment and production costs.

MORE



Simplified flow diagram of the National Distillers' synthetic ammonia plant in Tuscola, Ill.

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Jan.-Feb. ★ **U.S.I. CHEMICAL NEWS** ★ 1955

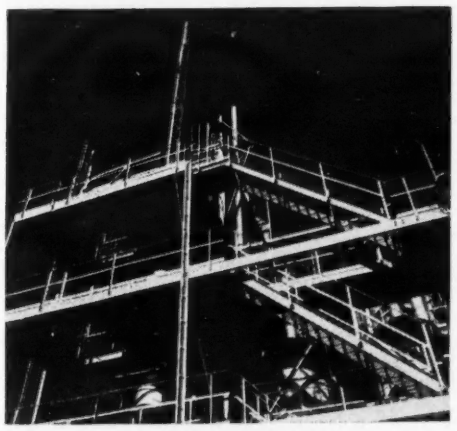
CONTINUED

New Ammonia Plant

Nitrogen Solutions

The nitrogen solutions are obtained by converting a part of the ammonia to nitric acid. The nitric acid is reacted with more ammonia to yield ammonium nitrate solutions. A variety of nitrogen solutions will be "custom-made" to satisfy the customer's requirements with respect to nitrogen content.

Nitrogen solutions are used in the manufacture of finished fertilizer and also for direct



Ammonia converter installation at National's new 60,000 ton a year ammonia plant.

application to the soil. National has storage facilities for anhydrous ammonia and nitrogen solutions to take care of some seasonal fluctuations in the demand for these products.

More Nitrogen Fertilizer Used

Consumption of fertilizer nitrogen is increasing enormously in all Midwestern states, and by 1955 demand in this area is expected to exceed 300,000 tons, according to the U.S. Department of Agriculture. Tuscola, Ill., is located in the heart of this rich farming region and makes an ideal site for National's new plant — the first of its kind in that state.

Higher Yields

According to authoritative agricultural reports, an average of 10 pounds of nitrogen per acre was used in the corn growing areas during 1950. With this level of fertilizer nitrogen, the average yield was 42 bushels per acre. According to these reports, application of 40 pounds of nitrogen instead of 10 increased the yield by 13 bushels per acre. At average farm prices this extra 30 pounds of nitrogen produced a profit over increased fertilizer costs of $15.75 per acre or 420% return.

Increased use of fertilizer nitrogen gives proof that farmers and farm leaders are becoming increasingly aware of the profitability of higher nitrogen levels in fertilizer programs. National Distillers' facilities for producing raw materials for the fertilizer industry assures the Midwest of a dependable source of supply to meet these demands.

Emphasis on Raw Materials

In addition to the new ammonia plant, National has four Midwestern sulfuric acid plants with a combined capacity of over 1,000 tons of acid a day, much of which goes to the fertilizer industry. This is in keeping with National's intent to place greater emphasis on bulk industrial chemicals and to expand operations where the company has competitive advantages by virtue of low cost, integrated facilities, well situated as to markets. In addition, National has strongly emphasized that its policy is to produce *raw materials* for the fertilizer industry — not to manufacture finished fertilizer.

For further information on National Distillers' fertilizer chemicals write to Editor, U.S.I. Chemical News.

New Light on Methionine Boost to Fish Meal Rations

During recent studies on sulfur bearing amino acids, indole was found to have a growth-retarding effect on the animals tested. However, the researchers also found, that methionine conjugated or combined with indole in such a way as to render this growth-retarding action ineffective. Since high levels of indole are present in fish meal and its products of digestion, this deactivation of indole is thought to explain the beneficial effects obtained when methionine is added to rations containing high levels of fish meal. Indole and other types of toxic putrefactive compounds are built up in fish products when decomposition sets in before processing.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

A wide-spectrum "idea" chemical (ethyl carbamate) with applications ranging from cancer therapy to the manufacture of plastics, reacts with organic and inorganic compounds to form intermediates or end products of commercial importance. **(No. 1070)**

Making corrugated cases easy to open, is the advantage of a new adhesive which seals cases securely during shipment and handling but still permits opening without struggle or use of knife. **(No. 1071)**

Moisture content of chemicals, clay, putty, and certain foods can be determined in less than 30 seconds according to the manufacturer of a new moisture tester. **(No. 1072)**

A floor tile with built-in adhesive on the back has been especially designed for do-it-yourself enthusiasts. Just strip off a plastic film and put the tile in place. **(No. 1073)**

Filtering compound for ultraviolet light, is reported to be particularly useful for sun-screen cosmetics. Safe for use on the skin, it is chemically stable, stable to ultraviolet light, and has excellent solubility. **(No. 1074)**

New lifting device for nonporous materials such as sheet metal, plate glass, etc., uses a vacuum cap that attaches to the moving object. Compressed air operating the hoist also creates the vacuum. **(No. 1075)**

A grease thickener said to make greases stand up better under high and low temperature operating conditions has been announced. Greases made with the new thickener have been boiled in water for days without breaking down. **(No. 1076)**

Oil for flushing mechanical vacuum pumps with-risk of contamination from detergents or volatile additives is said to be ideal for removing old oil, sediment, and dirt which accumulates in the pump mechanism. **(No. 1077)**

Paint stripping and decarbonizing solvent works by cold immersion, is self-emulsifying, and according to the manufacturer, it strips paint and primers and cleans carbonaceous tars, coke and carbon varnish. **(No. 1078)**

New liquid metals pump has been developed which has no moving parts, uses electric current to do the pumping. As the current moves through the metal, it pushes the metal forward. **(No. 1079)**

PRODUCTS OF U.S.I.

ALCOHOLS
Butanol (Normal-Butyl Alcohol)
Fusel Oil — Refined

Ethanol (Ethyl Alcohol)
Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof U. S. P., Absolute—200 Proof
Solox*—proprietary solvent—regular and anhydrous

ETHERS
Ethyl Ether, U. S. P.
Ethyl Ether, Absolute—A.C.S.

ACETONE—A.C.S.

ANSOLS
Ansol* M
Ansol* PR

ACETIC ESTERS
Butyl Acetate
Ethyl Acetate—all grades
Normal-Propyl Acetate

OXALIC ESTERS
Diethyl Oxalate

OTHER ESTERS
Diatol*
Diethyl Carbonate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-chloroanilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloroanilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate

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Choline Chloride Products
Curbay B-G* 80
DL-Methionine (Feed Grade)
Niacin, U.S.P.
Riboflavin Concentrates
Special Liquid Curbay*
U.S.I. Vitamin B_{12} and Antibiotic Feed Supplements
Vacatone* 40
Vitamin A, D_3, and K_3 Products

OTHER PRODUCTS
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Caustic Soda
Ethylene
Liquid Chlorine
Metallic Sodium
DL-Methionine (Pharm.)
N-Acetyl DL-Methionine
Nitrogen Solutions
Propionic Acid
Sulfuric Acid
Urethan, U.S.P.

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Division of National Distillers Products Corporation
99 PARK AVENUE, NEW YORK 16, N. Y. BRANCHES IN ALL PRINCIPAL CITIES

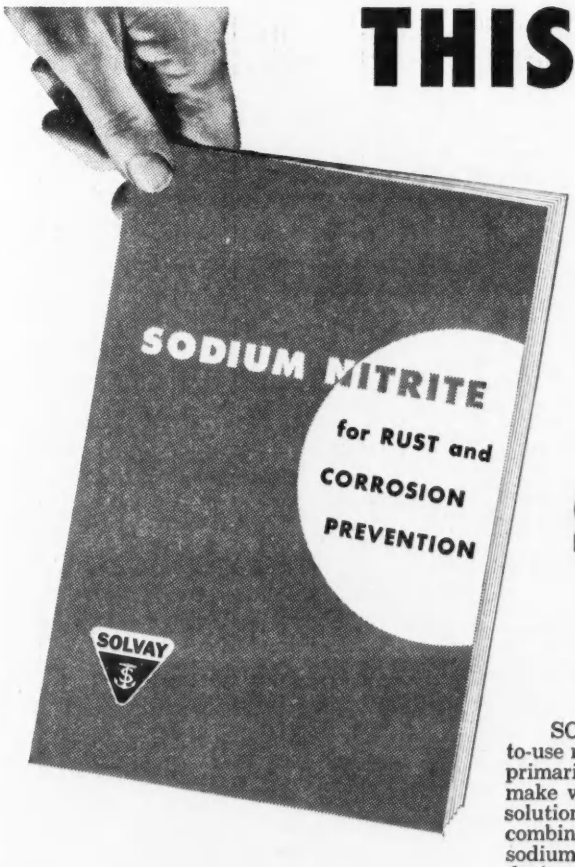
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
liq., No. 1, bbls., l.c.l. lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine, NF, V cryst., cns., 100-oz. lots oz. 1.15 - —
powd., precip., cns., 100-oz. lots. oz. 1.17 - —
Sulfate, USP, cns., 100-oz. lots. oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots oz. .37½- —
Dihydrochloride, USP, cns., 100-oz. lots oz. .54 - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½- —
Hydrobromide NF cns. 50-oz cns. oz. .47½- —
Hydrochloride, USP, cns., 100-oz. lots oz. .47½- —
Phosphate NF cns. 100-oz lots.oz. .61 - —
Salicylate NF cns. 100-oz. lots.oz. .55 - —
Sulfate, USP, cns., 100-oz. lots.oz. .42 - —
Quinine and Urea hydrochloride NF, cns oz. .56 - —
Quinoline, dms., c.l., frt. equald lb. .56¾- —
l.c.l., same basis lb 51¼- —
tanks, same basis lb .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb. .83 - —
powd., frt. alld, 100% basis lb. .88 - .93
Rauwolfia serpentina, root, powd., bbls, dms lb. 2.00 - 3.00
Red, BON acid maroons, pure, bbls lb 1.75 - —
resinated, bbls lb 1.50 - —
arylid, deep shades, bbls lb 3.60 - —
light shades, bbls lb 2.75 - —
maroon, bbls lb 3.60 - 5.90
Cadmium, CP, dark shade, bbls., frt. alld E. of Rockies lb. 4.30 - —
light shade, same basis lb 4.00 - —
medium shade, bbls., same basis lb 4.25 - —
medium-light shade, bbls., same basis lb 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
Lithopone, deep shade, bbls., same basis lb. 1.93 - —
light shade, bbls., same basis lb 1.76 - —
maroon shade, bbls., same basis lb 2.05 - —
medium shade, bbls., same basis lb 1.85 - —
medium-light shade, bbls., same basis lb 1.77 - —
orange-red shade, bbls., same basis lb. 1.64 - —
Red cadmium lithopone all shades, in smaller pkgs., 5c per lb higher; all prices are 1c per lb higher ex whse Los Angeles and San Francisco
Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
Eosin toner, bbls., works lb 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E St. Louis, N Y lb. .12¾- —
Iron oxide, nat., 75%-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley O., Easton, Pa., East St. Louis lb. .06 - —
syn. 98% ferric oxide, bgs., c.l., works lb. .12¾- —
l.c.l., works lb. .13 - —
Lake C toner, alizarin, bbls., works lb. 1.10 - 1.20
Lithol toner, bbls., works lb. .79 - —
rubine toner, pure, bbls., works. lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type, bbls., works lb. 1.40 - —
Maroon toner, MNPT, kgs., works lb. 3.60 - —
10,000-lb. lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works lb. .02½- —
l.c.l., works lb. .02¾- —
Naphthol ITR, bbls., works lb. 5.25 - —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works lb. .05¾- —
l.c.l., works lb. .07 - —
Para toner, bbls lb. .95 - —
chlorinated, kgs lb. 1.10 - 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb. 5.35 - —
tungstated, PTMA, works, kegs. lb. 5.95 - —
Spanish oxide, bbls., c.l., ex dock lb. .05¾- —
l.c.l., ex dock lb. .06 - —
ex whse., New York lb. .06½- —
Toluidine toner, deep shades, kgs., works lb. 1.60 - —
light shades, kgs., works lb. 1.60 - —
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt. equald l.c.l. .25
Venetian, 15%, bgs., works lb. .0350- .037
20%, bgs., works lb. .0475- —
25%, bgs., works lb. .0525- —
30%, bgs., works lb. .0550- —
35%, bgs., works lb. .0575- —
40%, bgs. works lb. .0625- —
Watchung-type, bbls lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red).
Red saunders, NF, powd., bbls lb. .35 - .40
Reserpine, cryst., bots., 100 gram lots gram 25.00 - —
25 gram lots gram 26.00 - —
10 gram lots gram 27.50 - —
Resorcinol, tech. grade, dms., c.l., works lb. .77½- —
l.c.l., works lb. .78½- —
USP, cryst., dms., works lb 2.70 - —
powd., dms, works lb 2.95 - —
Monoacetate, NF, dms lb 3.00 - 3.25
Rhatany root, bgs lb. .15 - .16
Rhodinol, 5-lb cans lb 25.50 -34.00
Rhubarb root, India, whole, bgs lb. 1.75N - —
powd., bbls lb. 2.50N - —
Riboflavin USP bots., dlvd kilo 115.00 - —
readily soluble, bots., dlvd kilo 130.00 - —
5'-phosphate-sodium, 100-gram lots or more kilo 140.00 - —
Rochelle salt (see Potassium-sodium tartrate).
Rosin gum and wood (see Naval Stores Protective Coatings market).
Rotenone, CP, bbls., works lb 20.00 - —
tech, bbls, works lb 16.50 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03 - —
ton lots, same basis lb. .04 - —
Rutin, NF, frb dms 25-kilo lots. kilo 17.50 -18.50
10 to 25-kilo lots kilo 17.50 -20.00
1 to 10-kilo lots kilo 18.90 -20.00
Ryania, 100% powd., bgs., c.l., works. lb. .22 - —
l.c.l., same basis lb. .24 - —

S

Sabadilla seed, powd., bbls lb. .49 - .45½
activated, ground with lime, bbls lb. .30 - .32
Saccharin, USP, gran., soluble, dms., 1000-lb lots lb 1.60 - —
smaller lots lb 1.70 - 1.80
powd., soluble, insoluble, dms., 1000-lb. lots lb 1.65 - —
smaller lots lb. 1.75 - 1.95
Saffron, Spanish, USP, tins lb. 35.00 - —
Safrol, dms lb. 1.25 - 1.50
Sage, Cretan, bgs lb. .11 - —
Dalmatian, bgs. lb. .40 - —
Italian, bgs. lb. .13 - —
Sago flour, raw, bgs lb. .06½- .06¾
refd., bgs lb. .08¼- .08¾
Sal soda (see Soda sal).
Salol, NF, gran., bbls., kgs lb. 1.10 - —
Powdered salol, 25c higher
Salt, rock, paper bgs., c.l. 100 lbs. .98 - —
table, vacuum, common, fine, paper bgs., c.l 100 lbs. 1.12 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton 24.00 -28.00
Saltpeter (see Potassium nitrate.
Sandalwood, East Indies, chips bgs. .65 - .66
powd., fib. dms lb. .75 - .76
Sanguinarine nitrate bots oz 4.75 5.50
Sarsaparilla root, imp., Honduras, bls lb. .65 Nom.
Mexican, bls lb. .65 Nom.
Sassafras root bark, ord., bls lb. .45 - —
select, bbls. lb. .65 - —
Schaeffer's salt, paste, dms., frt. alld., 100% basis lb. .95 - —
powd., bgs., frt. alld lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 12.25 -12.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. 30½- —
smaller lots lb 31 .32
Selenium, powd., dms., dlvd lb. 6.00 - —
Senega root, bls lb. 2.50 - 3.60
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No. 2, bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powdered, bbls., bxs lb. .18 - —
pods, bls. lb. .14 - —
Serpentaria root, bls lb. 4.25 - —
Sesame seed, Nicaragua, hulled, ship't, bgs lb. .25 - .25½
nat., bgs. lb. .16½- .17
Salvadorian, natural lb. No prices.
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .60 - —
bbls., 1,500-lb. lots lb. .62 - —
kgs., 1,500-lb. lots lb. .63 - —
refd., bgs., 1,500-lb. lots lb. .68 - —
bbls., 1,500-lb. lots lb. .70 - —
kgs., 1,500-lb. lots lb. .71 - —
Bonedry shellac prices for less than 1,500-lb lots 1c per lb higher for all packages.
Lemon, No. 1, bgs., 10-bg. lots lb. .60 Nom.
No. 2, bgs., 10-bag lots lb. .58 Nom.
Superfine, bgs., 10-bag lots lb. .56 Nom.
TN, bgs., 10-bag lots lb. .55 Nom.
Shellac in 1 to 9 bg. lots, 1c more
Shingle stain oil (see Oil, shingle stain).
Silica, amorph, dry grd., 325 mesh bgs., c.l., works ton 25.00 - —
t.c.l., works ton 30.00 -40.00
hard-quartz, 99½, 325 mesh, bgs., c.l., works ton 20.00 - —
t.c.l., works ton 25.00 -30.00
140 mesh, bgs., c.l., works ton 15.00 - —
t.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .16 - —
t.c.l., works lb. .20 - .28½
Silver bullion, ingots, cs Troy oz. .85¼- —
Cyanide, fib, dms., 2,500-oz. lots. oz. .77¾- —
1,000-oz. lots oz. .77¾- —
500-oz. lots oz. .77¾- —
100-oz. lots oz. .78¼- —
Silver nitrate, CP, crystals, bots., 2,500-oz. lots oz. .54¾- —
1,000-oz. lots oz. .56 - —
500-oz. lots oz. .58½- —
250-oz. lots oz. .57 - —
USP granular silver nitrate 4c per oz. higher.
Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 - —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 - —
Soapbark, whole, bls lb. No prices
crushed bgs., bbls lb. No Prices
powd., bbls lb. No Prices
Soda ash, dense, 58% paper bgs., c.l., works 100 lbs. 1.70 - —
t.c.l., stock points 100 lbs. 2.80 4.57
bbls, c.l., works 100 lbs 2.30 —
t.c.l., stock points 100 lbs. 3.35 4.12
bulk, c.l., works 100 lbs. 1.40 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.65 - —
t.c.l., stock points 100 lbs. 3.75 4.52
bbls., c.l., works 100 lbs. 2.20 —
t.c.l., stock points 100 lbs. 3.25 5.52
bulk, c.l., works 100 lbs 1.35 —
Caustic, flake, powd., 76% dms., c.l., works, frt. equald 100 lbs. 4.25 - —
t.c.l. stock points 100 lbs 5.45 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.70 - —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 2.70 - —
70%, sellers' tanks, works, dry basis 100 lbs. 2.80 - —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 2.80 - —
solid, 76%, dms., c.l., works 100 lbs. 3.85 - —
t.c.l., stock points 100 lbs. 5.05 - —



THIS NEW BOOK

Tells How To CONTROL or PREVENT RUST and CORROSION with SOLVAY SODIUM NITRITE and Sodium Nitrite Mixtures

SOLVAY Sodium Nitrite provides a low-cost, safe and easy-to-use means of protecting many metals from rust and corrosion, primarily iron and steel. Dilutions as low as 1/10th of 1% will make water solutions non-corrosive; and 3 to 5% spray or dip solutions will produce protective films on metal surfaces. When combined with materials such as phosphates or caustic soda, sodium nitrite's protective action can be extended or obtained during cleaning, neutralizing or similar operations.

This new booklet contains detailed information on how SOLVAY Sodium Nitrite prevents rust and corrosion, and how its protective action can be utilized, either alone or in combination with other materials. It also contains an extensive bibliography covering 59 published papers on the use of sodium nitrite and nitrite compounds for corrosion prevention.

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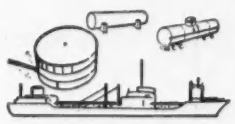
*In Western Hemisphere Countries.

A Few Typical Applications


Hydrocarbon service and fuel oil tanks

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Sodium Nitrite • Chloroform • Caustic Soda • Monochlorobenzene • Para-dichlorobenzene
Ortho-dichlorobenzene • Chlorine • Methylene Chloride • Methyl Chloride • Carbon Tetrachloride

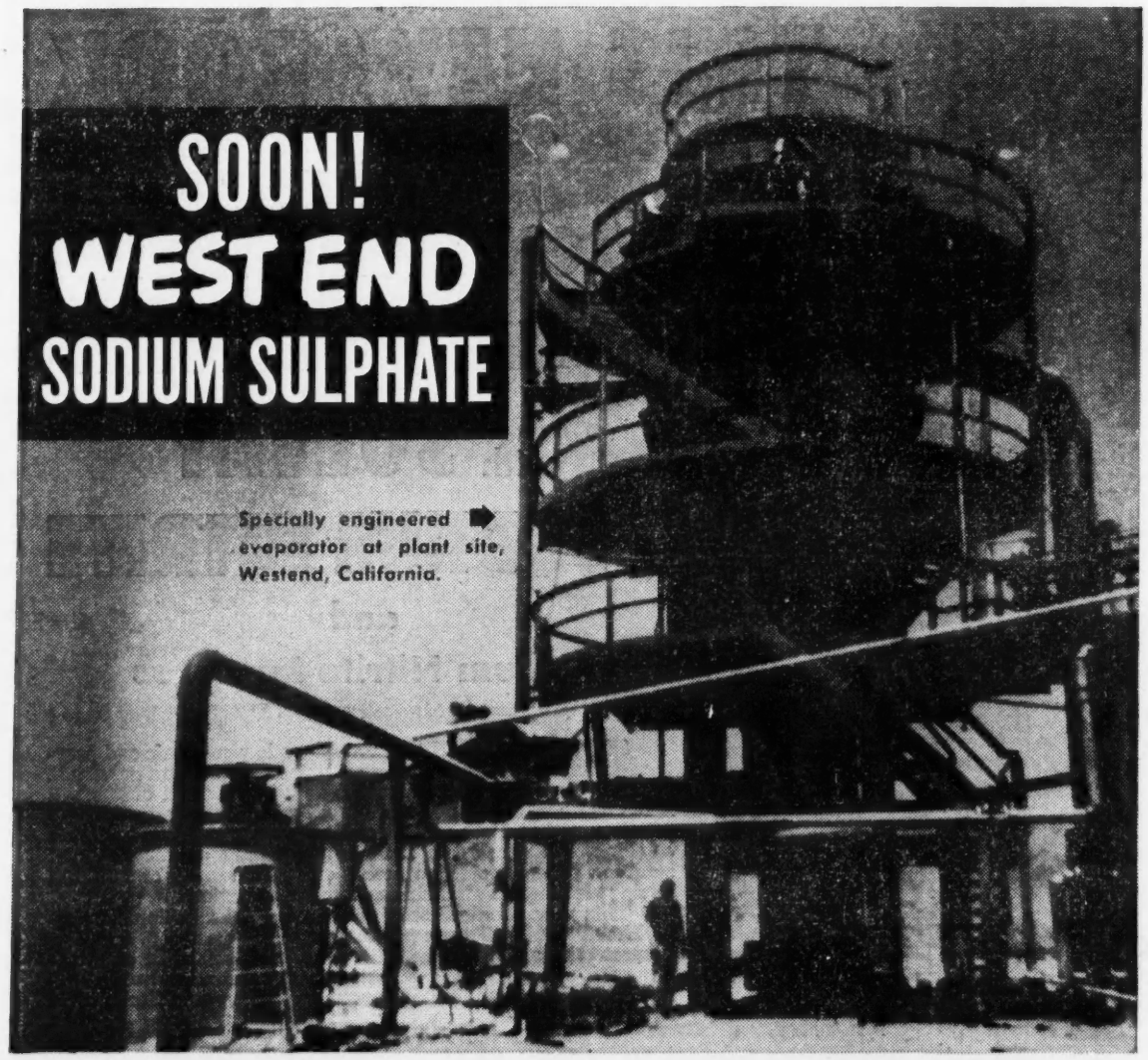
Soda, Sal.—Sodium Sulfa Drugs

Soda, sal., bgs., c.l., works 100 lbs. 1.40 - —
c.l. works 100 lbs 1.70 - —
Sodium acetate anhyd., bgs., c.l., works lb 12 - —
dms., l.c.l., works lb. .12¾- —
NF, 60%, gran., dms., c.l., works lb. .11 - —
dms., l.c.l., works lb. .1230- —
Alginate, NF, white powd., dms., ton lots, works lb. .87 - 1.30
refd., bbls., works lb. 83 - —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.40 - —
smaller lots lb 2.45 - 2.50
p-Aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted lb 3.75 - —
smaller lots, same basis lb 3.80 - 4.25
Antimoniate, bbls., c.l., dlvd. E lb. 29 - —
c.l., dlvd E lb. .30½- —
Arsenate, dms., c.l., works lb. .12½- —
l.c.l., works lb. .13¾- .14¾
Arsenite, dms., c.l., works lb. .13½- —
l.c.l. works lb. .14¼- .15½
soln., dms., works gal. 70 - 1.10
Ascorbate, dms., 25-50 kilo lots. kilo.16.00 - —
10-kilo lots kilo.16.35 - —
5-kilo lots kilo.16.75 - —
1-kilo lots kilo.17.00 - —
bots., 500-gram lots kilo.17.50 - —
Benzoate, tech., bbls., dms., 100-lb lots or more lb. .39 - —
USP, bbls. dms 100-lb lots or more lb 48 - —
Bicarbonate USP, gran., bgs., c.l., works 100 lbs. 2.70 - —
l.c.l., works 100 lbs 3.70 - —
powd., bgs., c.l., works 100 lbs 2.30 - —
l.c.l., works 100 lbs 3.30 - —

Sodium bichromate, bgs., c.l., works. lb. .11½- —
l.c.l., works lb. .12 - .13¼
Bifluoride, bbls., c.l., works, frt. equaled lb. .17½- —
l.c.l., same basis lb. .1790- —
Bisulfate, bulk., c.l., works 100 lbs. 2.00 - —
dms., cbys., c.l., works 100 lbs. 3.00 - 3.60
l.c.l., works 100 lbs. 3.50 - 4.10
Bisulfite, anhyd., bgs., c.l., works. 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - —
soln., 35°, bbls., c.l., works. 100 lbs. 1.55 - —
l.c.l., works 100 lbs. 2.05 - —
Borate (see Borax).
Bromide, USP, bbls., kgs., works. lb. .34 - .35
Cacodylate, NF, dms., jars lb. 6.25 - 6.50
Carbonate, anhyd. (see Soda ash).
cryst., monohydrated (see Soda, sal).
monohydrated bgs., c.l., works 100 lbs. 2.90 - —
l.c.l., works 100lbs. 3.30 - —
Carboxymethyl cellulose (see CMC).
Chlorate, cryst., dms., c.l., works lb. .08¾- —
l.c.l., works lb. .10¼- .11
Chloride, tech. (see Salt).
USP, dms lb. .05 - .12
Chlorite, tech., dms., c.l., works. lb. .58 - —
20-ton lots or more, works. lb. .66 - —
smaller lots, works lb. .70 - .73
Chloroacetate, tech., dms., c.l., works lb. .27 - —
l.c.l., works lb. .28 - —
Chromate, dms., c.l., works lb. .13¼- —
l.c.l., same basis lb. .13¾- .15

Sodium, citrate, anhyd., dms. lb. .60 - .65
NF VIII, gran., dms lb. .26 - .30⅛
USP, XVI gran., dms lb. .29½- .34
Sodium citrate USP powd prices ½c. higher.
Cyanate, dms., 1,000-lb lots, works. lb. .85 - 1.10
smaller lots, works lb. 1.00 1.25
Cyanide flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .178 - —
over 1,000-lb lots lb. .188 - —
100-lb. to 1,000-lb. lots lb. .198 - —
Granular sodium cyanide 1c. higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .14 - —
l.c.l., works lb. .14¾- —
anhyd., dms., c.l., works lb. .17 - —
l.c.l., works lb. .17¾- —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10-ton lots lb. .13½- —
smaller lots lb. .14 - —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1250- —
l.c.l. works lb. .1290- —
Formate, bgs., c.l., dlvd. E 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Gentisate, 100-lb. fib dms lb. 8.50 - —
Gluconate, refd., dms. lb. .80 - .83
tech., dms lb. .35 - —
Glutamate, mono-, dms., c.l. lb. 1.55 - —
Glycerophosphate, NF, cryst., bbls. lb. 2.10 - 2.25
powd., bbls lb. 2.15 - 2.30
soln., 75%, cbys lb. 1.45 - 1.60
Hydride, dms., works lb. 1.80 - 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .20 - —
l.c.l., frt. alld lb. .20½- —
Hydroxide, tech. (see soda caustic).
NF, pellets, 100-lb dms. 1 to 100-dm. lots lb. .18½- .23

Sodium hypophosphite, NF, dms., ton-lots or less lb. .95 - .98
Hyposulfite, USP (see Sodium thiosulfate).
pea crystals, bgs 100 lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 - 5.00
photo grade, bgs., c.l., works. 100 lbs 4.50 - 4.75
l.c.l., works 100 lbs. 5.00 - 5.05
tech., bgs., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms lb. 2.55 - —
Lactate, edible, 50%, cbys., dms., works lb. .21½- —
60%, cbys., dms., works lb. .26½- —
tech., 50%, cbys., dms., works, lb. .16¼- —
Lauryl sulfate, dms., c.l., dlvd lb. .22 - —
l.c.l., dvld lb. .23 - —
tanks, dlvd lb. .20 - —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran., bgs., c.l., works ton.78.50 - —
l.c.l., ex whse ton.124.50 -129.50
Sodium metaborate, octahydrate in bbls. $24.50 per ton higher
Tetrahydrate, c.l., bbls., works. ton.199.50 - —
Metallic, bricks, 14,000 lb. or more, works lb. .17 - .19
less than 14,000 lb. lots, works. lb. .175 - .195
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.10 - —
l.c.l., works 100 lbs. 5.20 - 7.10
dms., c.l 100 lbs. 5.25 - —
l.c.l. 100 lbs. 5.60 - 6.00
Pentahydrate, bgs., c.l., works. 100 lbs. 4.10 - —
l.c.l., works 100 lbs. 4.45 - —
dms., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 5.10 - —
Molybdate, bbls., cbys., works lb. .85 - .95
anhyd., powd., dms., works lb. .85 - .92
cryst., dms., works lb. .70 - —
Monohydrate (see Sodium carbonate, monohydrated).
Naphthionate, bbls lb. .70 - —
Nitrate, crude, dom., bgs., c.l., works. ton.47.00 - —
bulk, c.l., works ton.43.50 - —
imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.51.25 - —
bulk, c.l., same basis ton.47.75 - —
Nitrite, USP, bbls., c.l., works, frt. equald lb. .08 - —
l.c.l., same basis lb. .09½- —
Orthosilicate, conc. dms., c.l., works 100 lbs. 6.00 - —
l.c.l., works 100 lbs. 6.35 - 6.75
hydrated, flake, bbls., c.l., works 100 lbs. 5.25 - —
l.c.l., dlvd. 100 lbs. 7.00 - —
Oxalate, 88%, bgs., works 100 lbs.10.85 - —
Para-aminobenzoate (see sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25½- —
l.c.l., same basis lb. 26½- .28¼
pellets, bgs., c.l., same basis lb. .25 - —
l.c.l., same basis lb. .26 - .28
Pentachlorophenate, powd., bgs., c.l., same basis lb. .24 - —
l.c.l. same basis lb. .25 - .27
Pentachlorophenate, 20,000 lbs. min. truckloads, ¼c. per lb. over carlot prices.
Perborate, NF, tech., bgs., c.l., works lb. .173 - —
l.c.l., works lb. .178 - —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .1860- —
l.c.l., same basis lb. .1910- .1960
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
powd., dms lb. .47 - .48
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.45 - —
l.c.l., works 100 lbs. 7.85 - —
USP, dried powd., bgs., dms., works lb. .19 - .20¼
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.90 - —
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.05 - —
l.c.l., frt. equald 100 lbs. 7.25 - —
tribasic, cryst., bgs., c.l., frt. equald 100 lbs. 4.20 - —
l.c.l., frt. equald 100 lbs. 4.60 - —
Sodium phosphates in dms. 60c. higher than bgs.
Prussiate, yellow (see Sodium ferrocyanide).
Pyrophosphate, acid., bgs., c.l., works, frt. equald 100 lbs.10.75 - —
ferric, dms., 1,500-lb. lots, works. lb. .31 - —
smaller lots, works lb. .32 - —
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
l.c.l., frt. equald 100 lbs. 8.10 - —
Salicylate, USP, dms lb. .68 - —
Sesquicarbonate, bgs., c.l., works 100 lbs. 2.10 - —
l.c.l., dlvd., zone 1 100 lbs. 3.85 - 4.10
zone 2 100 lbs. 4.10 - 4.35
zone 3 100 lbs. 4.40 - 4.65
zone 4 100 lbs. 5.10 - 5.35
Sales zones are: (1) All States E. of Miss. R. and N. of south bound of Ky. and Va.; Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia. and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn.; Mo. (except St. Louis), Neb., E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98°; N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo., and El Paso, Tex.
Sesquisilicate, hydrated, bgs., c.l., works. 100 lbs. 4.60 - —
l.c.l., works 100 lbs. 4.95 - —
dms., c.l., works 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - —
Silicate, liq., 40° 1:2:3, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works 100 lbs. 1.70 - 2.30
tanks, works 100 lbs. 1.00 - —
47°, turbid, 1:2.9, dms., c.l., works. 100 lbs. 1.95 - —
l.c.l., dms., works. 100 lbs. 2.55 - 2.80
tanks, works 100 lbs. 1.60 - —
52°, turbid, 1-2-3, dms., c.l., works. 100 lbs. 2.30 - —
l.c.l., works 100 lbs. 2.65 - 3.05
tanks, works 100 lbs. 1.95 - —
solid, 1:3.2, bgs works ton 57.50 - —
Silicofluoride, bgs., c.l., works lb. .07 - —
l.c.l., works lb. .07 - .08
Sodium silicofluoride in dms., 4/10c. higher.
Stannate, dms., works, frt alld. E. lb. .517 - .571
Sulfa drugs (see Sulfa names).



New plant now under construction to tap rich natural source of sodium sulphate

West End Chemical Company will start producing salt cake and anhydrous sodium sulphate by approximately mid-summer, 1955, at the rate of 50,000 tons annually. Output will be geared to serve the national market. Production can be stepped up at any time. The natural brine deposits at Searles Lake, California, will support a production many times this amount.

West End Sodium Sulphate and Salt Cake will be of very high quality. They will be *chemicals* produced by a chemical process in a chemical plant — not by-products.

Inquiries are invited. West End will be pleased to work out freight schedules on salt cake or anhydrous sodium sulphate to any points in the United States in quantities required.

WEST END CHEMICAL COMPANY
SODA ASH · F. M. SMITH BRAND BORAX · HYDRATED LIME

West End Chemical Co.

Executive offices: 608 Latham Square Building, Oakland 12, California · Plant: Westend, California

Sodium sulfanilate, bbls., works lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., dlvd., E. ton.50.00 -52.00
detergent grade, bgs., c.l., works ton.34.00 - —
rayon grade, bgs., c.l., works ton.31.00 - —
USP cryst fib dms lb. .17½ .18
gran fib dms lb. .17½ .18
Sulfide, flake, dms., c.l., works, E., frt. equald lb. .05¼- —
c.l., same basis lb. .05¾- —
fused, bbls., c.l., works, E., frt. equald lb. .04¾- —
c.l., same basis lb. .05¼- —
Sulfite, anhyd., bgs., c.l., works. 100 lbs. 3.00 - —
c.l., same basis 100 lbs. 2.80
powd., bbls., c.l., works 100 lbs. 7.25 - —
c.l., works 100 lbs. 7.50 - —
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .05½- —
c.l., works lb. .07 - —
liq., 40-44%, tanks, works, 100% basis ton.110.00 - —
Sulfocyanide, CP, (see Sodium thiocyanate).
Tetraborate (see Borax)
Tetrasulfide, liq., 40%, dms., c.l., works lb. .½- —
c.l., works lb. .04 - —
Thiocyanate, CP, dms lb. .55 - .65
tech., anhyd., 1 ton lots or more, works lb. .317 - —
less than ton lot, works lb. .337 - —
Thiosulfate, NF, cryst., bbls lb. .12½- —
tech., dms., works lb. .04 - —
tech. (see Sodium hyposulphite).
Titanate, ctns., c.l., works lb. .10½- —
5-ton lots, works lb. .10¾- —
1 ton or less, works lb. .11 - —
Trichloroacetate, 98% 100-lb. dms., c.l., frt. alld., E. lb. .37½- —
c.l., frt. adjusted, E. lb. .39½- —
50-lb. dms., c.l., frt. alld. E. lb. .38 - —
c.l., frt. adjusted, E. lb. .40 - —
10-lb. cns., c.l., frt. alld. E. lb. .44 - —
c.l., frt. adjusted, E. lb. .46 - —
Prices on Sodium trichloroacetate W. of the Rockies are ¼c. per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.05 - 8.25
c.l., same basis 100 lbs. 8.30 - 8.45
Trisilicate, powd., 1:32.2, bgs., c.l., works 100 lbs. 8.65 - —
c.l., works 100 lbs. 9.40 -13.35
dms., c.l., works 100 lbs. 9.05 —
c.l., works 100 lbs. 9.80 -13.35
Tungstate, tech., kgs., dlvd. E lb. 1.60 —
Sodium ammonium phosphate, bbls., works frt equald lb. .24 —
Sodium-carboxymethyl cellulose (see CMC).
Sodium chloroacetate (see Chlorophen sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
c.l., same basis lb. .21½- —
Sodium zirconyl sulfate, fiber dms., 1,000-lb. lots or more works lb. .28 - —
smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, works gal. .31 - .35
petroleum (see Petroleum solvent, partial aromatic).
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works, lb. .34 - —
smaller lots works lb. .37 - .39
Sorbitan tristearate, fib. dms., 20,000-lb. lots works lb. .33 - —
10,000 to 20,000-lb. lots, works, lb. .35 - —
smaller lots works lb. .38 - .40
Sorbitol, cryst., pellets, dms., c.l., works lb. .30 - —
1 to 5-ton lots, works lb. .32 - .33
powd., dms., 1 to 5-ton lots, works, lb. .38 - .39
soln., coml., aqueous, dms., c.l., works lb. .24¼- —
ton lots works lb. .25 —
smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
reg., 70%, aqueous, dms., c.l., works lb. .16 - —
ton lots works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb. .15 - —
Soybean meal, 44%, bulk, Decatur, ton.68.00 -69.00
protein, chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., c.l., works lb. .06 - —
Sparteine sulfate, cns oz. .85 - .95
Spearmint leaves, dom., bls lb. .75 - —
imp., bls lb. 1.25 - —
Spruce extract, liq., reg. tanks, works lb. .01¾- —
powd., super. bgs., c.l., works. lb. .05¼- —
l.c.l., works lb. .05½- —
Squill, white, bls lb. .17 - .19
powd., bbls. bxs lb. .18 - .21
St John's bread, edible bls lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .729 - .739
Oxide, dms., dlvd. E lb. .89 - .90
Stannous chloride, anhyd., dms., works lb. .775 - 1.043
Hydrous (crystals), dms., works. lb. .73½- .74½
Sulfate, dms., works lb. .89½- .93½
Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.14 - —
l.c.l. 100 lbs. 7.29 - —
powd., paper bgs., c.l. 100 lbs 7.26 - —
l.c.l. 100 lbs. 7.41 - —
Prices for corn starch in cotton bags 25c per 100 lbs higher.
Potato, dom., Idaho, bgs., c.l., works lb. .06¾- —
Maine, bgs., c.l., works lb. .06 - —
l.c.l., spot lb. .08 - .08½
Rice, bgs., l.c.l. lb. .15½- .16
Wheat bgs lb. .0755- .0780
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 - .61
Stearine oleo (see Oleostearine).
Stomach substance, not USP, 100-lb. fib. dms lb. 2.90 - —
Stramonium leaves, bgs lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .15 - —
Sulfate, bulk gram. .15 - —
Strontium bromide, NF, cns., dms. lb. .77 - .78
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, jars, 25-lb. lots lb. 3.42 - —
Nitrate, bbls., c.l., works 100 lbs.11.00 - —
l.c.l., works 100 lbs.12.00 - —
Salicylate, NF, dms lb. 1.65 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15
Strophanthin, K, bots oz.25.00 -25.50
G, (see Ouabaine, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax, USP, cs lb. .78 - .80
Strychnine, NF, powd., cns., 100-oz. lots oz. 1.19 - —
Phosphate, NF, cns., 100-oz. lots oz. 1.14 - —
Sulfate, USP, cryst., cns., 25-oz. lots oz. .96 - —
powd., 100-oz. lots oz. .85 - —

Styrene monomer, polymer grade, 99½%, dms., c.l., frt. equald. lb. .22¼- —
l.c.l., same basis lb. .23¼- —
tanks, same basis lb. .21 - —
synthetic rubber grade, 99%, dms., c.l., frt. equald lb. .19¼- —
l.c.l., same basis lb. .20¼- —
tanks, same basis lb. .18 - —
Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, refd., white, bgs., refy., E. 100-lbs. 8.65 - —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works. lb. .76 - —
Sulfabenzamide, dms lb. 4.00 - 4.50
Sodium, dms lb 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
Sodium, fib. dms lb. 5.00 5.20
Sulfadiazine, USP, microcrystals, dms lb.10.60 -11.10
powd., dms lb.10.25 -10.75
Sulfadiazine-sodium, USP, dms lb.11.25 -11.75
microcrystals, dms lb.10.60 -11.10
Sulfaguanidine, USP dms lb. 2.50 - —
Sulfamerazine, USP, microcrystals. lb.10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb.11.25 -11.75
Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
powd., dms lb. 8.50 - 9.00
Sulfanilamide, USP, 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms lb 1.70 - 1.90
powd., dms lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.50 - 6.75
Sulfapyridine, NF, powd., bots., tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, USP, microcrystals, dms lb. 3.15 - 3.30
powd., dms lb. 2.80 - 2.95

Sulfathiazole-sodium, USP, dms lb. 3.05 - 3.20
Sulfur, coml., flour, bgs., mines, bbls., mines 100 lbs 3.05 - —
tanks, works 100 lbs. 2.30 - —
lump, bgs., mines 100 lbs. 2.20 - —
bbls., mines 100 lbs 2.65 - —
crude, bulk, c.l., mines, contract. long-ton.26.50 - —
export, f.o.b. vessels, Gulf ports long-ton.31.00 -33.00
domestic and Canada, f.o.b vessel Gulf port long-ton.28.00 -29.50
refd., flowers, USP, bgs., mines. 100 lbs. 4.00 - —
bbls. 100 lbs. 5.25 - —
flour, light, bgs., mines 100 lbs. 3.60 - —
bbls., mines 100 lbs. 4.50 - —
lump, bgs., mines 100 lbs. 3.30 - —
rolls, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.40 - —
salt block, bgs., mines 100 lbs. 3.50 - —
virgin block, bbls. mines 100 lbs. 3.45 - —
rubbermakers, coml., reg., bgs., mines 100 lbs. 2.40 - —
bbls., mines 100 lbs. 3.55 - —
98-100% passing through 325 mesh, bgs. mines 100 lbs 2.50 - —
bbls., mines 100 lbs. 3.65 - —
refd., bgs., mines 100 lbs. 3.25 - —
bbls., mines 100 lbs. 4.30 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.70 - —
bbls., mines 100 lbs. 3.85 - —
10% pine tar, bgs., mines. 100 lbs 3.90 - —
Dichloride, dms., c.l., works, frt. equaled lb. .03¾- —
l.c.l., same basis lb. .04½- —
tanks, same basis lb. .03½- —

Sodium Sulfanilate—Talc, Fibrous, N.Y.

Sulfur dioxide, liq., coml., cyls., works lb. .09 - —
multi unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., c.l., dlvd lb. .24 - —
Monochloride, 55-gal., dms., c.l., frt. equald lb. .03¾- —
l.c.l., same basis lb. .04½- —
tanks, same basis lb. .03½- —
Sumac leaves, 28%, bgs., ex-docks. ton.125.00 - —
ground, bgs., ex-dock ton.120.00 - —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 - .91
Carteret, N. J. unit-ton. .88 - .91
Triple, 46% or more, a.p.a. pulv., bulk, c.l., East Tampa, Fla. unit-ton. .98 - —

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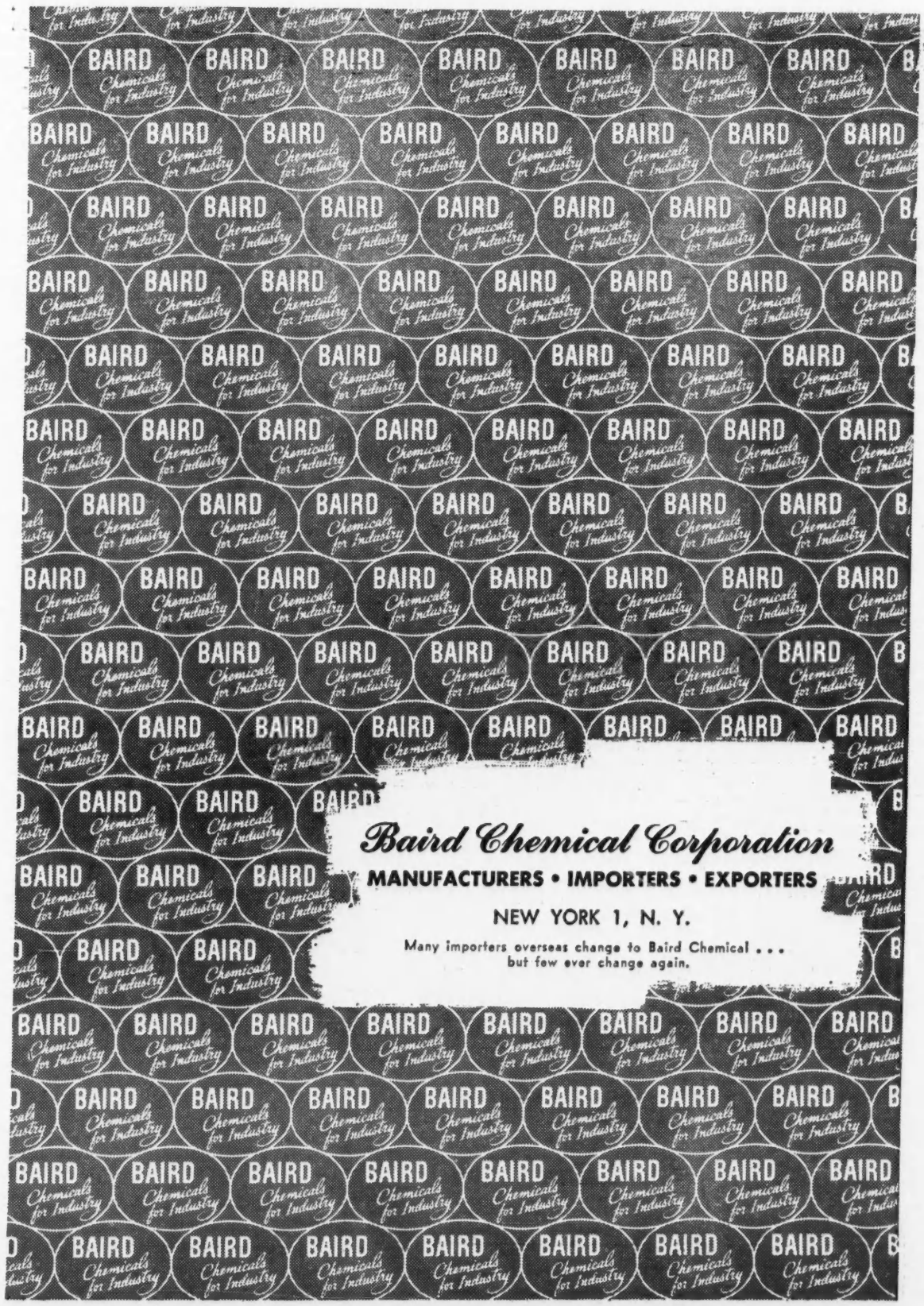
2,4,5-T, dms., c.l., works, frt. equald. lb. 1.25 - —
l.c.l., same basis lb. 1.30 - 2.30
Isopropyl, ester, dms., c.l., works, frt. equald lb. 1.30 - —
l.c.l., works lb. 1.35 - —
Talc, dom., ord., Calif., grad., bgs., c.l., works ton.32.00 -38.50
Vermont off color, grd., bgs., c.l., works ton.14.00 - —
l.c.l., works ton.17.50 - —
fibrous, New York, grd., bgs., c.l., works ton.25.00 -30.00
l.c.l. works ton.28.00 -30.00


BAIRD
Chemicals for Industry
Baird Chemical Corporation
MANUFACTURERS • IMPORTERS • EXPORTERS
NEW YORK 1, N. Y.
Many importers overseas change to Baird Chemical . . .
but few ever change again.

Talc, Fibrous, 99.5%—Zinc Acetate

Talc, fibrous, 99.5%, 325 mesh, bgs., c.l., works ton. 27.00 - —
l.c.l., works ton. 30.00 -32.00
99.95% micronized, bgs., works ton. 36.00 - —
Imp., Canadian grd., bgs., c.l., mines ton. 15.25 - 35.00
Tallow, edible, tanks, dlvd lb. .10¾- —
inedible, extra, tanks, dlvd lb. .08½- —
fancy, bleachable, tanks, dlvd. lb. .08¾- —
No. 1, tanks, dlvd lb. .07¼- —
special tanks, dlvd lb. .08 - —
sulfonated, 25%, bbls., l.c.l. lb. .07¾- .09
50%, bbls., l.c.l. lb. .09¼- .11
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 6.00 - —
Chicago unit-ton. 7.00 - —
Tapioca flour Brazilian, ex whse, bgs lb. .08½- .09
Siamese, top grade, ex whse lb. .06¾- .07
Tar acid oil, 15-18%, dms., c.l., frt equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28% dms., c.l., same basis. gal. .54 - .56
l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53% dms., c.l. same basis. gal. .70 - .72½
l.c.l., same basis gal. 73½ - .74½
tanks, same basis gal. .62½ - —
Coal (see Coaltar)
Tartar emetic (see Antimony-potassium tartrate).
Terpine glycol ether, dms., c.l., works lb. .23½- —
l.c.l. works lb. .25½- —
tanks, works lb. .22 - —
Terpine hydrate, coml., bbls., c.l. lb. .24½- —
l.c.l. lb. 25 - .25½
NF, cryst., fib. dms lb. .57½- .62
powd., fib. dms lb. .65 - .69
a-Terpineol, dms., l.c.l., dlvd E lb. .19 - —
Terpineol, coml., dms., c.l., South. lb. .13½- —
l.c.l., South lb. .14 - —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns., dms. lb. .60 - .75
prime, dms lb. .55 - .70
Propionate, dms. lb. 1.75 - 2.00
Terra alba, (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. .79 - —
Propionate, USP, 100-gm. lots, bots gram. .75 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works lb. .20½- .21½
smaller dms., works lb. .23½- .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .64 - —
l.c.l., dlvd. E lb. .65 - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .69 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .57½- —
l.c.l., dlvd. E lb. .58½- —
tanks, dlvd E lb. .56 - —
Tetrapotassium phosphate (see Potassium phosphate)
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Thallium metal, dlvd lb. 12.50 -15.00
Sulfate 99%, bots., dlvd lb 8.00 -13.00
Theobromine, NF, fib. dms lb. 3.75 - —
And sodium acetate, USP, fib dms lb. 4.05 - 4.10
Sodio-Salicylate, NF, fib. dms lb. 3.35 - 3.40
Theophylline, anyhd. or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms. kilo. 100.00 - —
Mononitrate, USP, fib. dms kilo. 100.00 - —
Thiocarbanilide, dms lb. .50 - .52
Thiodiphenylamine (see Phenothiazine).
Thiourea, tech., dms., c.l., works lb. .40 - —
l.c.l., works lb. .42 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo. 450.00 -500.00
Spanish, bgs. lb. .10 - —
Thyme leaves, French, bgs lb. .20 - —
Thymol, fib. dms lb. 2.75 - 3.00
Iodide, NF, dms lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. .87 - —
Oxide (see Stannic oxide)
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous)
Titanium dioxide, anatase, chalk resistant, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
ceramic, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
reg., bgs., c.l., dlvd lb. .22½- —
l.c.l. dlvd lb. .23½- —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton. 120.00 - —
Niagara Falls, N. Y. ton. 137.50 - —
5-ton lots, same basis. ton. 142.50 - —
ton lots, same basis. ton. 147.50 - —
Milled titanium dioxide $7.50 per ton higher.
rutile, non-chalking, bgs., c.l., dlvd. E lb. .24½- —
l.c.l., dlvd. E lb. .25½- —
Hydride, cns., works lb. 7.95 - 9.00
Pigment, calcium-rutile base, bgs., c.l., dlvd. lb. .08⅜- —
l.c.l., dlvd lb. .08⅝- —
Tetrachloride, tech., dms., c.l., works lb. .40¾- —
l.c.l., works lb. .43¾- —
tanks, works lb. .39¾- —
dl-a-Tocopherol, bots kilo. 149.65 - —
Acetate, bots kilo. 136.00 - —
o-Tolidine base, dist., kgs lb. 1.30 - —
Tolu balsam, cns. lb. 4.25 - 4.50
Toluene (see Toluol).
p-Toluenesulfonamide, flake, dms., frt. alld lb. .64 - .66
powd., dms., works lb. .70 - —
solid, dms., frt. alld lb. .61 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms., frt. alld. lb. .60 - .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa. gal. .34 - —
Birmingham dist gal. .32 - —
Chicago dist gal. .35 - —
Cleveland, dist gal. .34½- .35
Geneva, Utah gal. .26 - —
Johnstown, Pa. gal. .32 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Toluol, coaltar, indust. or nitration, tanks, works, Minnequa, Colo. gal. .32 - —
Philadelphia district gal. .34 - —
Pittsburgh dist gal. .32 - —
Sparrow's Point, Md. gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32½- .33
Petroleum, indust., 2° tanks, works:—
Albany, N. Y. gal. .33 - —
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich. gal. .35 - —
Houston, Tex. gal. .35 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —
2,4-Tolylenediamine, cryst., fib., dms., frt. alld lb. .94 - —
powd., same basis lb. 1.00 - —
Tonka beans, Angostura, cns. lb. 1.65 - 1.80
Brazilian, Surinam, cs lb. 1.00 - 1.25
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .20 - —
l.c.l., t.t.l., works lb .26 - —
Triacetin, dms., c.l., dlvd. E or Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., dms., c.l., works lb. .40½- —
l.c.l., works lb. .41½- —
tanks, works lb. .39 - —
Phosphate, dms., c.l., works lb. .52 - —
l.c.l. same basis lb. .53 - —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works. lb. .67 - —
l.c.l., same basis lb. .68 - —
tanks, same basis lb. .65 - —
Trichlorobenzene, dms., c.l., works, frt. alld. E lb. .14½- —
l.c.l., frt. alld E lb. .15½- —
tanks, frt. alld. E lb. .13 - —
Prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or truckloads, works, frt. equald. lb. .11¼- —
dlvd. E lb. .12¼- —
l.c.l., dlvd. E lb. .13½- —
tanks, works, frt. equald lb. .10¼- —
dlvd. E lb. .11 - —
Trichloroethane, dms., c.l., works. lb. .13 - —
l.c.l., works lb. .13½- —
tanks, works lb. .11½- —
Tricholine citrate, 65% soln., rct. cbys., works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l. dlvd. lb. .36 - —
tanks, dlvd lb. .33 - —
petroleum, dms., c.l., dlvd lb. .35 - —
l.c.l. dlvd. lb. .36 - —
tanks, dlvd. lb. .33 - —
Triethanolamine, dms., c.l., dlvd. E lb. .23¼- —
l.c.l., same basis lb. .24¼- —
tanks, same basis lb. .21½- —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Triethyl citrate, tech., refd., dms., c.l., works lb. .48 - —
l.c.l., works lb. .53 - —
tanks works lb. .45¾- —
Phosphate, dms., c.l., works lb. .38 - —
c.l., same basis lb. .39 - —
tanks, same basis lb. .37 - —
Triethylene glycol, dms., c.l., dlvd E. lb. .19¾- —
l.c.l., same basis lb. .20¾- —
tanks, same basis lb. .18 - —
Triethylenetetramine, dms c.l., dlvd E lb. .48½- —
l.c.l., dlvd. E lb. .49½- —
tanks, dlvd. E lb. .47 - —
Trimethylamine, 25-30% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 - —
l.c.l., works, frt. equald., 100% basis lb. .42½- —
tanks, works, frt. equald, 100% basis lb. .33 - —
Tripentaerythritol, bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .40 - —
Triphenylguanidine, bbls. works lb. .90 - —
Tripropylene glycol, dms., c.l., frt. alld. E. lb. .19¾- —
l.c.l. frt alld. E. lb. .20¾- —
Prices 1c. per lb. higher in West.
Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic)
Phosphate (see Sodium phosphate tribasic).
Trypsin, pharmaceutical, 1:25, dms., works lb. 6.25 - —
dl-Tryptophane, fib. ctns., works. kilo. 165.00 - —
Tuba root (see Cube root)
Tungsten metal, powd., 96.8%, dms., dlvd lb. 4.95 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots gram. .75 - .85

U

Urethane, USP, dms lb 1.50 - —
Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, dom., 46% N, bgs., c.l., t.l., dlvd. zone 1 ton. 120.00 - —
l.c.l., ex whse., zone 1 ton. 140.00 - —
45% N, bgs., c.l. (30 tons), dlvd. zone 1 ton. 137.00 - —
Zone 2 ton. 153.00 - —
Zone 1 prices are basis delivered Kan., Neb., N. Dak., Okla., S. Dak., Tex. and E.
Zone 2 prices include all states west of Zone 1.
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va. ton. 128.00 - —
C grade, tankcars, same basis. ton. 126.50 - —
37 grade, tankcars, same basis. ton. 155.50 - —
Uva ursi leaves, bls lb. .72 - .14

V

Valerian root, Belgian, bgs lb. .38 - .40
dl-Valine, dms., works lb. 21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton. 56.00 - —
cups, 28-30% tannin, bgs., ex-dock ton. 44.00 -45.00
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .08 - —
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 10.50 -11.00
Mexican, cuts, tins lb. 10.25 Nom.
whole, tins lb. 10.50 -11.00
Tahiti, cs. lb. 10.25 Nom.
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex guaiacol, tins, 25-lb. lots lb. 3.00 - —
smaller lots lb. 3.05 - 3.15
ex lignin, tins, 25-lb. lots lb. 3.00 - —
smaller lots, tins lb. 3.05 - 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tankcars, dlvd. E lb. .16½- —
tanktrucks, dlvd. E lb. .17½- —
n-Butyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, frt. equald lb. .10½- —
Ether, USP, anesthetic, 50 c.c., hospitals, bot. 1.12 - —
75 c.c. bot. 1.56 - —
Ethyl ether, tech., dms., c.l., works. lb. .26 - —
l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb. .20 - —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.
Trichloride (see Trichloroethane).
2-Vinylpyridine, dms., works lb. 1.40 - 1.50
Vinyltoluene, dms., c.l., works lb. .20¼- —
l.c.l., works lb. .21¼- —
tanks, works lb. .19 - —
Viosterol, in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units, 1,000,000 units. .035 - —
in nat. veg. oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .02 - .04¾
lots of 1 billion USP units, 1,000,000 units. .025 - .05¼
lots of less than 1 billion USP units, 1,000,000 units. .03 - .05¾
Vitamin A synthetic, acetate, crystalline beads, 500,000 A units per gram, gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo. 72.50 - —
325,000 units per gram, same basis kilo 47.10 - —
250,000 units per gram, same basis kilo. 36.25 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liquid, in oil 1,000,000 A units per gram, 1,000,000 units. .12 - —
Palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units. .12 - —
in oil, 1,000,000 A units per gram, 1,000,000 units. .12 - —
B (see Thiamine hydrochloride).
B2 (see Riboflavin.
B complex, natural (see Rice bran concentrate and Yeast).
B6 (see Pyridoxine hydrochloride).
B12 crystalline, 1-gram or 5-gram vials gram. 245.00 - —
oral grade solids, in containers of 1 and 5 grams of B12 activity gram. 185.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver, Calciferol, and Viosterol).
D2, dry, 850,000 units per gram, kilo lots kilo. 42.50 - —
less than kilo lots kilo. 45.00 - —
D3 (see Calciferol).
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin)
K, Active (see Menadione).
K1, 25 gram bots gram. 4.50 - —
Violet methyl toner (see Blue methylviolet toner
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls lb. 2.50 Nom.
Warfarin, 0.5%, dms., 50 lb lots, dlvd lb. 1.95 - —
25-49 lb. lots, f.o.b., N.Y., or Chi lb. 2.05 - —
5-24 lb. lots, cns., f.o.b., N. Y., or Chi lb. 2.15 - —
Wattle bark, fair average, African, bgs., ex dock ton. 98.00 - —
merchantable, bgs., ex dock ton. 94.00 - —
extract, liq., 35% tannin, bbls. lb. .09¾- .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .09¾- —
S. Africa, 60% tannin, bgs., ex-dock, duty extra lb. .10 - —
Wax, amorph, (see Wax microcrystalline).
Bayberry, bgs., spot lb. .42 - .43
Bees, crude, African, bgs lb. .60 - .62
Brazilian, bgs lb. No stocks.
Central American, bgs lb. .70 Nom.
Chilean, bgs lb. .70 Nom.
refd., bleached, white bricks lb. .72 - .74
slabs lb. .71 - .73
yellow, bricks lb. .62 - .64
slabs lb. .61 - .63
Candelilla, crude, bgs lb. .63 - .65
refd., bgs lb. .66 - .69
Powdered candelilla, 20 mesh, 7c. per lb. higher, 80 mesh, 7c.; 100-200 mesh, 8c.
Wax, carnauba, chalky, bgs., ton lots lb. .68 Nom.
North Country, No. 2, bgs., ton lots lb. .84 - .85
No. 3, Ceara, crude, bgs., ton lots lb. .66 - .69
refd., pure, bgs. ton lots lb. .76 - .78
tech., bgs., ton lots lb. .70 - .72
Parnahyba, crude, bgs., ton lots lb. .70 - .72
yellow, No. 1 Ceara, bgs., ton lots lb. 1.03 - 1.04
Parnahyba, bgs., ton lots lb. 1.08 - 1.09
Powdered carnauba wax price differentials same as powdered candelilla.
Japan, bgs lb. .47 - .48
Microcrystalline, 170°-175°F., m.p., ASTM, penetration 15-20, amber, ctns., 20,000 lbs., group 3, works lb. .13 - .14
smaller lots, same basis. lb. .14 - .15
black, ctns., 20,000 lbs., same basis lb. .11¼- .12½
smaller lots, same basis. lb. .12½- .13½
white, ctns., 20,000 lbs., same basis lb. .24 - .25
smaller lots, same basis. lb. .25 - .26
180°-185° F.m.p., ASTM, penetration, 7-11; amber, ctns., 20,000-lb. lots, same basis. lb. .16 - —
smaller lots, same basis. lb. .17 - —
Wax, microcrystalline, 180°-185°F. m.p. ASTM, penetration 7-11, black, ctns., 20,000 lbs., same basis lb. .14½- —
smaller lots, same basis. lb. .15½- —
white, ctns., 20,000 lbs., same basis lb. .27 - —
smaller lots, same basis. lb. .28 - —
190°-195°F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb. .20 - —
smaller lots, same basis. lb. .20½- —
Montan, dom., refd., bgs. lb. .31 - .32
imp., crude, Bohemian, bgs. lb. .13 - .13½
German, bgs lb. .14½- .15
Ouricury, refd., bgs lb. .93 - 1.03
Paraffin (see P).
Spermaceti, blocks, cs lb. .25½- .31
cakes, cs lb. .26½- .32
Sugar cane, dom., refd., slabs, works lb. .65 - .75
spot lb. .67¼- .72¼
White lead (see Lead, white).
White pine bark, rossed, bls lb. .18 - .19
White precipitate, USP, powd., dms. lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb. .18 - .19
rossed, bls lb. .19 - .23
Ginger (see Snake root, Canada).
Witch hazel bark, bls lb. .16 - .17
leaves, bls lb. .20 - .21
Wollastonite, fine, bgs., c.l., works. ton. 39.50 - —
l.c.l., ex whse ton. 56.00 - —
medium, bgs., c.l., works ton. 27.00 - —
l.c.l., ex whse ton. 44.00 - —
Woolfat, crude (see Degras).
USP (see Lanolin).
Wormseed, American, bgs lb. .20 - .25
Levant, bgs lb. 4.25 - 4.50

X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms., l.c.l., works, frt. equald lb. .30 - —
45°-47°C., dms., c.l., same basis. lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fractions, over 7°C., b.r., except meta, dms., c.l., same basis gal. .90 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
meta fraction, over 7°C. b.r., ams., c.l., same basis gal. 1.01 - —
l.c.l., same basis gal. 1.04 - —
tanks, same basis gal. .90 - —
Xylidines, mixed, dms., c.l., truckload, works lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .38 - —
Xylol, coaltar, indust., tanks, works, Bethlehem, Pa. gal. .34 - —
Birmingham district gal. .32 - —
Chicago district gal. .35 - —
Cleveland district gal. .35 - —
Geneva, Utah gal. .27 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .34 - —
Minnequa, Colo gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind. gal. .35 - —
Youngstown, O gal. .32½- —
petroleum, indust., tanks, works:— Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Houston, Tex. gal. .35 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —

Y

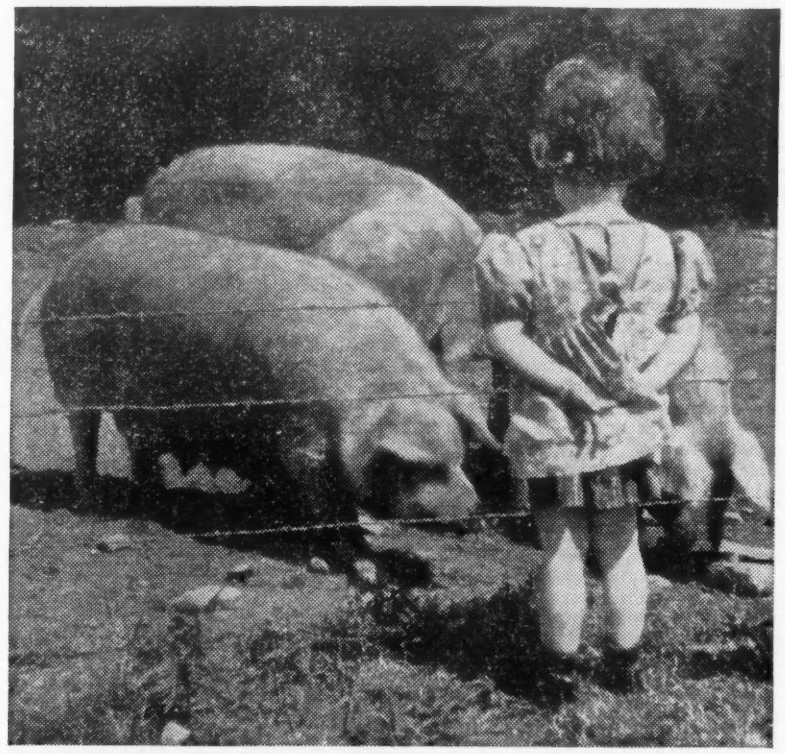
Yara yara, cns lb. 2.15 - 2.65
Yeast, brewer's, dry, USP, 20 Int'l B units per gram, 100-lb. dms lb. .47 - —
90 Int'l B units per gram, 100-lb. dms lb. .52 - —
200 Int'l B units per gram, 100-lb. dms lb. .56 - —
300 Int'l B units per gram, 100-lb. dms lb. .60 - —
Yellow, barium chromate, CP, bbls., dlvd. N. l.c.l., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below
Benzidine AAA, bbls., dlvd lb. 2.00 - —
AAOT, bbls lb. 2.25 - —
Lightfast, bbls. lb. 3.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 - —
lithopone, all shades, bbls., frt. alld., E. of Rockies lb. 1.15 - —
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.
Chrome, CP, bbls., dlvd. N. Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .32 - —
Dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c. higher); Miss., N. C., S. C., Penna., Dallas, Tex., 1¼c higher; Ft. Worth, Tex., 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Hansa, 10 G, bbls., same basis as yellow, chrome lb. 2.15 - —
G pigment, bbls lb. 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .05¼- —
Peruvian type, bgs., l.c.l. lb. .038 - —
pure, bgs., c.l., works lb. .10½- —
l.c.l., works lb. .10¾- —
Mercury oxide, bbls., 1,000-lb. lots. lb. 5.58 - —
smaller lots lb. 5.60 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd lb. .26 - —
basic, dlvd lb. .31 - —
Yerba santa leaves, bls lb. .40 - .42
Yohimbine hydrochloride, bots, tin. oz. 4.75 - 5.25

Z

Zein, bgs., 30,000-lb. lots, works lb. .38 - —
1,000 to 30,000-lb lots, works lb. .40 - —
smaller lots, works lb. .43 - —
Zinc acetate, tech., bbls., dms., works lb. .27 - —
NF VIII, dms lb. .53 - —

—Continued on page 70

Notes from the makers of
Myvax Vitamin A



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Not so long ago, a new vitamin was announced. Turned up in freshly rendered lard. It was called the "lard factor." A little later, the people who found it decided it had the biological activity of vitamin A but differed from any known form.

This news had the usual trigger reaction, and other vitamin researchers joined in. One group, working with a lard distillate, found approximately 10 units of vitamin A activity per gram, didn't know what form it took, confirmed the existence of the "lard factor." Another worker found no indication of the "lard factor."

The circle came around again when members of the original team took another whack at the problem and found ordinary vitamin A in small amounts. The existence of the "lard factor," they concluded, was unlikely, but not completely excluded.

Naturally enough, we were interested in all this. We joined in and found that the so-called "lard factor" in molecular distillates of lard is in fact, plain, old, everyday vitamin A.

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Volume 167 **January 24, 1955** **Number 4**

Tackling the Dope Problem

The senatorial advances in the fields of health problems in the current session have included also a bill to put bigger and sharper teeth in the statutes designed to deal with the misuse of narcotics and other habit-forming drugs. The need for such strengthening is clearly obvious. The proposed penalties for illicit dealing in such commodities would run as far as death for furnishing certain narcotics to minors. Higher jail terms would be imposed all along the line.

In that respect the new move is commendable and necessary. That can justly be said also of its full-scale review of the federal narcotic laws. It is on more controversial ground however in its backing of the Hoover commission's recommendation that the Bureau of Narcotics be transferred from the Department of the Treasury to the Department of Justice, although it aims well in the intention to give narcotic agents more powers in line with those of FBI investigators. Its proposal of a narcotics division in the U. S. Public Health Service also is good—fundamentally—although the contemplated functioning in the treatment of narcotic addicts could not simply be undertaken.

As was said here several weeks ago, the real need in the direction of successful dealing with the problem of narcotic addiction and the contributory traffic is for efficient local laws and, more especially, for their proper enforcement. New Jersey has an effective law applying to addicts. It does not call for their remedial or other treatment; it sends them to jail. The treatment plan does not meet with general approval in most communities throughout the United States—a model local ordinance and a model state law for commitment have been drafted—the cost is the basis of the objection. A bill similar to the New Jersey law has been vetoed twice in New York. The consequences are quite obvious in conditions in neighboring communities of the two states.

Some two weeks ago, investigators for the United Nations warned that steps would have to be taken to guard more rigidly against the smuggling of narcotics into this country. Finding markets for opium and its derivatives has become an economic necessity for certain producing countries, the investigators said. They had much more to say on many aspects of the problem in a report covering almost eighty pages. About the same time the UN "Bulletin on Narcotics" contained a report that a study in France had found only 700 drug addicts among its population of 45,000,000 and that addiction among persons less than twenty years of age was almost unknown.

It should be a "must" for all those in congress or other government places and all those elsewhere who have, or are supposed to have, some concern with the dope evil to read both of those reports. Those whose responsibility it is to deal with such things should be compelled to show why conditions are so different in this country from what they are in France. They should also read and carefully digest the report of the hearing before a subcommittee of the committee on foreign relations of the United States senate, eighty-third congress, second session, on the international opium protocol. Then they should see to it that the state, the municipality, the precinct in which they live—all have a law that deals effectively with both ends of the illicit traffic in narcotics and that it is enforced as it must be to do any good. That is the real job for an extrapartisan group of properly concerned local citizens. Washington is too far away even with today's supersonic speed of transit.

A Question for Engineers

Migration is a big problem these days. It arises from all sorts of sources and is promoted by all sorts of ferments. Population is shifting. Plants are being moved. Communities of all sizes everywhere are being faced with a number of consequent problems covering all sorts of things, from air-pollution to zoning. So, it is not surprising that a proposed shift which got considerable attention two years ago has again come into argument and inducement. It would transfer the headquarters of the national organizations of chemical, civil, electrical, mechanical, metallurgical and mining engineers out of the City of New York. The bids for the engineering center come from Chicago, Philadelphia, and Pittsburgh. Some of them are said to include rather attractive inducements. New York has got around to putting up a stiff opposition, as well as an appeal by way of a plan to provide a new headquarters building to replace the one occupied for almost fifty years, which for several years has been considered too small because of the large growth in the membership of the five societies by which it is used.

New York doubtless can meet the space attractions of the other cities—about their other attractions for the engineers there can be some doubt. There is, also, something disturbing about the arguments by other bidders that New York is not an important center of activity in any of the lines encompassed by the five engineering groups. It is also argued that there is no good reason why the five groups should have a common headquarters location. That point, naturally, is not stressed in any of the bids which seek to get the joint center. It is generally admitted that no one other city is any more representative than New York of all the engineering fields involved in the advocated transition. One point reported to have been made for Philadelphia is that it is the home of the American Society for Testing Materials which has a very broad field of interest and activity in the realm of engineering. In rebuttal it is argued that ASTM headquarters should be moved to the new engineering center in New York. There are those who feel that all such organizations should have their headquarters in Washington for various reasons, some of which are well founded.

No authentic information is yet available on whether the question of relocating their headquarters would be put to a vote of the members of the five societies. As they total something like 150,000, the handling of such an "election" would not be a simple matter, and the result might easily be quite confusing. New York's new position has reached a point of presenting to the engineering societies a plan to keep their headquarters in the city as a part of the coliseum development at Columbus circle. It is reported that the Triborough Bridge and Tunnel Authority has agreed to sell them a site in that area for $400,000, and that the money has been pledged. The Pittsburgh bid is reported to include an offer of $1,500,000. The extent to which financing will be, must be, an influence in the choice is something that must be reckoned with.

Health Politics Resumed

Health help news has got back on the political side again. President Eisenhower is scheduled to talk to congress this week on the health item in his program. Three senators have beaten him to it with a bill which is all over the place on a sort of flexible subsidy basis. Obviously, it is a financing scheme, more than a furnishing means, for meeting the public need for more efficient health care.

The new bill does have some objectives in the direction of providing better health care. It would provide financial assistance to supplement state efforts to construct health service centers for out-patient use. It would also provide some sort of assistance for the training of physicians and nurses. What it would do about recruiting candidates for such training and finding places and personnel for doing the training is not clear. The medical and nursing school facilities of this country are very far from adequate. Their expansion on a level of essential competence would not be a simple task.

The new health bill has one very promising purpose. It would authorize the President to set up a bipartisan commission—a suprapartisan or extrapartisan one would better — to study the health problems of the nation and to plan for their solution. This provision would encompass the facility difficulties just mentioned as well as the financial needs of hospitals. It is aimed also at some aspects of the methods of dealing with chronic diseases; but it is difficult to see how the role of government could be made more beneficial or even more useful in that respect than it is now.

The constitution of the proposed study group is something to which all those engaged in, or otherwise seriously interested in, the providing of adequate efficient health care should give most careful consideration. The work of the commission should have their unstinted support in all such aspects as they know the study can be beneficial to the public as a whole.

There is still too much reliance on health insurance schemes in the senatorial bill for health service—which is something different. There is a need for the easing of the financial burden of such service at various places. But, the average expenditure for medical service is relatively low, being estimated to constitute less than 5 percent of the family outlay. The need is for more readily available service everywhere. The meeting of that need is a job for the medical profession, nursing, and the drug trade. It has little, if any, useful place for government funds or other political implementation. Government can well keep its health activities within the purview of the really serviceable Public Health Service and Food and Drug Administration. It has more than it can handle efficiently in the health realms of the Veterans Administration. It can get all the experience it needs in areas of health insurance by way of the scheme which the Civil Service Commission has laid before congress for the covering of federal employees.

Washington Talks It Over

By Ralph L. Cherry
Chief, OPD Washington Bureau

Legislation for extension of the expiring defense production act beyond its termination date of June 30 will be more than a routine matter of congressional consideration this session as a result of developments taking place within the administration and congress. There appears to be a definite move on foot to tie on a standby control program as a rider to the defense production act bill.

It will be recalled that the matter of having laws in standby on the statute books permitting the application of immediate controls over price, wages and production in the event of a war emergency was one of the first problems that had to be dealt with by President Eisenhower when he took office. The President's view then was that standby controls were not desirable because they would be disturbing to business.

Word has now leaked out from official sources that Mr. Eisenhower no longer holds to the same viewpoint. If congress wants this authority on the books, it needs only to pass the necessary enabling bill and he will sign it. As a matter of fact, all that needs be done is for someone in authority at the Capitol to say the word and the bill will be ready in twenty-four hours. The ODM has been working on such a bill for over a year and can send it to the Capitol at anytime.

Training for Government Men

A proposal that holds much interest for the chemical industry and probably will be looked upon with considerable favor has now gained the support of President Eisenhower and has been recommended to congress for approval. It is a plan to send government employees into private industry for training in the use of new methods, technics and machines.

Since the start of the Eisenhower administration, it has been the overall policy, particularly in the Department of Commerce, to staff the top jobs of the commodity divisions with industry men serving on a rotating basis. The idea, of course, was to assure industry that the men in charge had more than a theoretical knowledge of the problems of the particular industry. It has also done much to give industry a better insight into problems in government.

In effect, the plan now proposed is a reversal of this scheme except that the government men who went into industry training would not be in supervisory jobs, although they would work alongside the management and get the feel of business administration and its problems. Mr. Eisenhower said that the plan would help to reach the goal of the greatest possible efficiency in governmental operations.

Office Workers' Office Hours

Firms in the chemicals and allied products industries with several branch operations and a complicated system of reporting employees' time to the main office should become acquainted with the latest policy being followed by the government in the matter of compliance with the record keeping requirements of the fair labor standards act for office workers. The policy is this:—

"If, in fact, a record is kept with respect to each employee employed on a weekly or monthly basis in an establishment or department thereof operating on a fixed office hour schedule indicating the exact schedule of hours per day and hours per week which that employee is normally expected to work and if, in fact, the payroll (or other) records maintained by the employer indicate for each worker or for each group of workers, that such schedule hours were, in fact, adhered to, this would be in compliance with the regulations. When hours in excess of or less than those scheduled are worked, the employer must supplement this record by showing the exact number of hours worked each day and each week."

US in Trade Fairs

The administration's aim for greater participation of American industry in world trade fairs is being pushed vigorously by the Department of Commerce. The latest development is the issuance of a series of reports designed to aid United States world traders in exhibiting their products abroad.

The new reports are a part of the department's program of stimulating world trade through greater world-wide knowledge of the accomplishments of American industry. They will consist of a series of separate publications giving basic data on major international trade fairs and industry exhibits held abroad. They will list the type, objective, and organization of the principal trade fairs, services available to distributors, and number of buyers attending.

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Heavy Chemicals

The rise in price of saltcake and other sodium sulfates was made more uniform in the industry last week, as several producers raised prices to correspond with advances made January 1 by others. Demand for saltcake remained strong, particularly for use in the kraft paper industry. While supplies were thought to be short in the south, it was felt by some sources that stocks were adequate west of the Mississippi.

Hydrochloric acid supplies continued overplentiful, despite efforts made by producers to keep production down. Byproduct acid from organic chlorination came more heavily into the market from some quarters due to stepped up production of such materials as DDT. Chlorine stocks were also heavy, but not as lopsided as supplies of hydrochloric.

Although aluminum metal was advanced 1 cent per pound, this increase was not expected to affect prices for aluminum chemicals. One producer scheduled increases for lithium carbonate, one of the basic lithium chemicals, to be effective January 25. Labor difficulties in Northern Rhodesia and Chile had a firming influence on the copper market, as strikes curtailed world copper output.

The alkalies showed little in the way of change during the week. Caustic soda sold in moderately good volume to the rayon industry, as that branch of textile manufacture showed signs of recovery from its current slump. Pulp and paper industry consumers were active, as evidenced by the current high rate of paper output. Potassium carbonate sales for specialty glass continued to feature that market.

The American Pulp and Paper Association reported production for the week ended January 15 as 94.5 perent of theoretical capacity, as compared with the revised figure of 90.4 percent for the previous week and 92.6 percent for the corresponding week of last year.

Acid, Boric—Quotations for all grades were unrevised. There was some difference of opinion as to the supply position, as some producers reported adequate stocks while others felt that some materials were in close balance with current buying interest. There were indications of short delays in shipments from some quarters. Producers hastened to point out, however, that there was no cause for alarm due to the fact that there was enough material on hand to take care of existing requirements.

Acid, Chromic—The market was judged steady, with demand holding at a good pace. Plentiful supplies allowed for prompt delivery against contract commitments. Prices were unchanged.

Acid, Hydrochloric—Supplies continued burdensome to producers due to heavy production of acid as a byproduct of organic chlorination. Output of pesticides and other chlorinated hydrocarbons remained at high levels, and manufacturers encountered storage problems for the acid. Synthetic and Mannheim processes accounted for sizable quantities of hydrochloric, although some producers pointed out that they had curtailed production by these methods as much as possible.

Consuming demand held up well, but was by no means in favorable balance with current output. Buying interest was well sustained by paper producers, the textile industry, and the steel industry. List prices were unchanged, but due to heavy supplies, shading was reported in some instances.

Acid, Nitric—The market position showed little change during the week. Steel demand was active. Supplies were plentiful at unchanged prices.

Acid, Sulfuric—The steel industry took material in good volume owing to the current high rate of steel production. The synthetic detergent industry also called for sizable quantities. Although petroleum demand was high, most sources felt that inquiry from that direction had decreased under last year's levels. The fertilizer industry showed an upswing in demand as formulators anticipated spring and summer agricultural needs. Current listings prevailed without change. Supplies were plentiful.

Alumina, Calcined—Quotations for this as well as other aluminum chemicals were expected to be unaffected by recent increases in aluminum metal. It was pointed out that production of aluminum was by a process which had little or nothing to do with output of aluminum salts. Consuming demand was fairly active, particularly for refractory and ceramic production. Supplies were plentiful, and available for prompt delivery.

Aluminum Sulfate—One source said that demand for water treatment had held up well all year. Further improvement in inquiry for water purification was expected for 1955. Due to the recent high level of paper production, substantial quantities were sold to mills for sizing. Cloth dyeing interest was about steady. Quotations were steady and unchanged, with supplies plentiful.

Ammonium Bicarbonate—Producers reported a pickup in buying interest. Quotations remained steady and unchanged. Supplies were such that consumers could get what they needed without delay.

Ammonium Chloride — Demand for granular fines was dull and featureless, as consumers limited purchases to prompt shipment for actual needs. Sal ammoniac sold well to the battery trade, however, as demand held to a steady level. Prices continued without change. Supplies were plentiful.

Borax—Fifty percent anhydrous material was judged tight by some observers, who indicated that in some cases, a short delay was encountered in shipment. The glass industry kept up an active demand for this material, and this factor, plus reportedly curtailed production accounted for the short supply position. Other types were in more adequate supply, and buyers had little or no difficulty in obtaining what they needed. Contract listings held steady, with no changes anticipated for the remainder of the first quarter.

Calcium Chloride—One source reported continuing strong demand for highway ice control and cold weather concrete. Others felt that lack of cold weather in some areas, as well as the passing of the winter peak season, were responsible for a slackening in demand. Current contract listings held without change, and producers contemplated no revisions for the near future. Supplies were judged comfortable by some observers, while others reported that they were running slightly behind on orders.

Chlorine—Supplies continued plentiful, primarily due to the current large volume output of the alkali industry where chlorine is by nature a product of the electrolytic process for manufacture of caustic soda. It was pointed out that although demand was good, the current chlorine capacity was much larger than consumer requirements.

Consuming interest was good from several industries. Paper and pulp manufacture accounted for large quantities, and ethylene glycol output was also high, although consumption there was said to have tapered somewhat due to the passing of the peak season for antifreeze. Inquiry for water treatment remained steady and in good volume. Prices were unchanged.

Copper Cyanide — Prices remained steady during the week. Technical material was listed at 60.9c. per pound, barrels, 20,000 pounds lots or more; 1,000 pound lots or more, 61.9c. per pound, same basis, and smaller lots, 63.9c. per pound, same basis. Supplies were adequate.

Ferric Chloride—Buying interest for sewage treatment remained steady, showing little or no change over the week. Quotations were unrevised. Stocks were available for prompt delivery.

Lithium Carbonate—Following recent declines in lithium hydroxide monohydrate, this basic lithium chemical has been slated for a decrease in price effective January 25 by at least one producer. Prices have been marked down to 90c. per pound, drums, 30,000 pound lots, delivered; 20 drums or more, 95c. per pound, same basis. Six to 20 drum price has been scheduled at $1 per pound, f.o.b. Eastern points, with $1.15 asked for less than 6 drum quantities.

Potash, Caustic—The soap industry remained active, withdrawing sizable

Price Trends

Advanced

Aluminum, metal, ingots, 1c. per lb.
pigs, 1c. per lb.
Tin, ½c. per lb.

Reduced

None

Comparative Price Indexes
(109—1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
98.44	98.44	98.26	98.53

(*For Current Prices see page 9*)

For Late Market Developments, See Page 4

amounts on contract. Material also moved well for various chemical applications and dyestuffs. Generally demand continued to improve following the year-end slowdown, and producers were of the opinion that the first quarter would be better saleswise than the first quarter of 1954. Price schedules continued without revision, and were considered steady. Present production and supplies were plentiful.

Potassium Carbonate—The continued boom enjoyed by the television industry, and consequent high production of television tubes made from special glass requiring potassium carbonate kept the tone of the market firm over the week. Demand for other end uses also held up well. Current output was well able to cope with buying interest, and in no instances were there any reported shortages.

Soda Ash—There was no change in official contract listings during the week. Manufacturers expected prices to hold steady and unchanged through the remainder of the quarter. Consuming demand, while fairly good, showed no inclination toward improvement. Dense ash moved in moderately good volume to the glass industry, but producers felt that the peak season for ordinary glass production was yet to come.

Light ash was reported moving out at a better rate than its heavier companion, owing to continuing strong demand from the aluminum, pulp and paper, and phosphate industries. Supplies of both light and dense were very comfortable.

Soda, Caustic—Liquid caustic sold to active demand during the week, while little or no change in buying interest was reported for solid. Quotations remained without change following the recent allowance of 10c. per hundred pounds on rayon grades to the rayon industry. Such a decrease was thought to have had a stimulating effect on consuming demand, and trade sources were optimistic concerning the future of rayon production. Pointing out that tire cord output was holding to high levels owing to the recent introduction of tubeless tires, caustic producers felt that staple output would also increase during the year, due to the completion of new rayon textile facilities in the south. Pulp and paper output remained high, and mills withdrew caustic in large volume at contract prices. Supplies were judged plentiful to lengthy, according to producer.

Sodium Bicarbonate—Buying interest held steady, with consumers in the market for immediate shipment to cover actual requirements. Prices held firm and unchanged. Reserves were plentiful.

Sodium Silicate — Demand continued fairly good as the boxboard industry came in for substantial amounts for adhesive use. Consumption for detergents also held up well. Prices continued steady and unchanged during the week. Supplies were in excellent shape, with producers able to furnish material to users without delay.

The Bureau of Census reports that production of all types of sodium silicate in October totaled 55,728 tons, as compared with 60,910 tons in September, and 64,740 tons in October, 1953. Stocks at plants October 31 totaled 66,930 tons, as compared with 67,736 tons at the end of September.

Sodium Sulfate—Producers continued to issue notices of advance for sodium sulfates, some prices effective as late as February 1. At least one source advanced saltcake prices by $4 per ton, bringing its quotation into line with the now more or less uniform $28 per ton, bulk, f.o.b. works, 100 percent sodium sulfate basis. Natural saltcake, currently listed at $17 per ton, f.o.b. works, moved well to the kraft paper industry following a recent increase of $1.50 per ton.

Anhydrous glauber's salt was slated for an advance to $52 per ton effective February 1. Already in effect was a $31 per ton bulk price for rayon grade sodium sulfate. Detergent grade was expected to be increased by $2 per ton the first of next month.

Industry sources last week felt that the main shortage of saltcake lay in areas along the south Atlantic and Gulf coasts, although in no instances were there reports of consuming mills being forced to suspend operations for lack of material. Supplies in consumers' hands west of the Mississippi were judged adequate. It was said that although rayon production had been curtailed in 1954, tire cord output had held to a high level, and as a result, saltcake byproduct output had been in good volume. Mannheim production had been cut back, however, due to heavy production of hydrochloric acid, and as a result, saltcake output fell off from that direction.

Tin Chemicals—Tin price fluctuated narrowly last week, ending at 87c. per pound. Oxide remained at 89c. to 90c. per pound, as to quantity. Potassium stannate was held at 65.4c. to 72c. per pound; sodium stannate, 51.7c. to 57.1c. per pound; stannic chloride, 72.9c. to 73.9c. per pound; stannous chloride, anhydrous, 77.5c. to $1.043 per pound; hydrous crystals, 73½c. to 74½c. per pound; sulfate, 89½c. to 93½c. per pound.

Nonferrous Metals

Aluminum—Three records were set in the aluminum industry last year. Production of 254,112,883 pounds in December set an all-time monthly record. Output in the fourth quarter was 746,795,795 pounds, a new quarterly record. Total production for the year amounted to 2,921,174,443 pounds, a new record for yearly output. Production in December was nearly 2,000,000 pounds over the previous record set in July, and output in the last quarter surpassed the third quarter's record by nearly 3,200,000 pounds.

Price of 23.2c. per pound for ingots and 21½c. per pound for pigs was uniform on spot last week, following increases in both grades by 1c. per pound. Demand continued strong, with supplies in good balance.

Copper—Domestic price of 30c. per pound continued firm and unchanged. The London market continued to edge upward. The primary market showed little change. For No. 2 copper scrap dealers continued to ask 28½c. per pound, although some material was offered at 28c. Although

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supplies were considered tight by most sources, it was pointed out that consumers were able to get what they needed without too much delay.

Crude production of primary copper in the United States in December totaled 85,581 tons as compared with 88,785 tons in November. Copper production during the year was off to 863,939 tons, as compared with 957,318 tons for 1953. Refined production of copper in the United States in December totaled 133,523 tons, as compared with 116,135 tons in November. Total refined production in 1954 was 1,311,249 tons, as compared with 1,395,003 tons in 1953.

Chromium—According to the Bureau of Mines, domestic production of chromite ore in October totaled 16,533 tons, while imports amounted to 85,682 tons. Consumption amounted to 78,942 tons. Consumption of chromite by the metallurgical industry in October totaled 46,097 tons; refractory, 21,464 tons; chemical, 110,671 tons. Consumption of ferrochromium including chromium briquets during October totaled 13,963 tons.

Lead—Pig lead remained steady, quoted at 14.8c. per pound, St. Louis, and 15c. per pound, New York basis. The General Services Administration last week sent out tenders requesting offerings for the national stockpile for domestically mined material. Deadline on offers was placed at January 20, with shipments slated to begin March 15. One source estimated that the GSA has purchased 10,000 tons of lead per month.

Mercury—Spot price continued unchanged at $322 to $324. Mexican material was said to be having somewhat of a softening influence on the London market as some quantities were offered at lower prices to sluggish demand. About 746 tons of mercury were produced in Italy during the first five months of 1954 as compared with 655 tons in the corresponding period of 1953.

Nickel—Nickel production for 1954 was recently estimated at an all time high of 390,000,000 pounds, or approximately 50 percent higher than the 1949 output. World output in 1954 is estimated at 50,000,000 pounds higher than for 1953. Canadian nickel output in 1953 amounted to 286,000,000 pounds, and was estimated to have reached 320,000,000 pounds in 1954. The government took a large portion of available nickel output for stockpiling. As previously, the steel industry was the largest single consumer of nickel metal in 1954, principally for stainless steels, engineering alloy steels, and jet engine alloys. The nickel plating industry was also a large volume consumer, having received more nickel in 1954 than in 1953. However, supplies available to the industry were short owing to government stockpiling and allocations. Consumption of nickel for catalysts in the chemical industry was substantially higher than in 1953. Also higher was consumption for the Edison sintered plate nickel-cadmium battery.

Estimated output of nickel for 1955 was placed at 415,,000,000 pounds. It was also expected that more nickel would be available to civilian consumers after government requirements are filled than was previously available. Current listings were unchanged, with metal at 64½c. per pound, f.o.b. refinery.

Tin—Straits was fractionally higher last week on spot, listed at 87c. per pound. Moderates sales continued, but most sources were optimistic about future prospects, particularly in the plating industry.

Zinc—Slab was quoted unchanged last week at 11½c. per pound, East St. Louis and 12c. per pound, New York basis. Special high grade material continued to draw the strongest demand, particularly for die casting manufacture. The GSA last week requested its usual tenders for offerings for government stockpiling. The administration specified that offers were to come from domestically produced material. Bids were due January 20 for delivery March 15.

Retires From Cyanamid Co.

Dr. Carle M. Bigelow, formerly director of the pharmaceutical department of Calco Chemical Division of American Cyanamid Company, Bound Brook, N. J., and recently assistant to the general manager of Cyanamid's fine chemicals division, retired as of January 1. Dr. Bigelow will remain as a part-time consultant for some time, headquartering at Bound Brook.

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Health Information Group Studies Child Health Care

Impressed by conditions revealed in Selective Service draft records and by other data, the Health Information Foundation joined financially with Pennsylvania State University in sponsoring a survey to determine what could be done to remedy the neglect of child health impairments revealed under the system of school phyical examinations in operation in thirty states.

It sought to ascertain how the school medical programs and the millions of dollars which they cost could be made really to pay off in terms of national health. Data available when the survey was begun in 1952 indicated that something could be done to remedy the child ailments. The endeavor was to determine how that best could be done.

The survey covered fifteen communities in Pennsylvania where cooperative efforts of public schools, physicians, parents and community organizations were applied to that objective. The findings and conclusions are reported by the foundation in a booklet, "Rx for Healthier Children." It is reported that 37.22 percent of the 1,703 children examined in a sampling survey had medical defects, and 77.9 percent had dental defects.

All aspects of these conditions were studied along various channels of social science, special attention being given to why there was such an extensive failure to do what the school examinations indicated to be needed and how that failure could be overcome.

It was found that the corrective action rate can be raised if the program is properly integrated into the school system. The report tells what the schools can do to raise that rate; what physicians can do, and what community organizations can do. Copies of the report are available from Health Information Foundation, 420 Lexington avenue, New York 17.

New York Textile Chemists Hear Borghetty January 28

The New York section of the American Association of Textile Chemists and Colorists will hold its next meeting January 28 at 8:15 p.m. in the Statler hotel, New York. Speaker will be Hector C. Borghetty, in charge of textile chemical product development for Rohm & Haas Company, Philadelphia. Mr. Borghetty will discuss "Crease Resistant Finishes on Cotton Fabrics."

Chemstrand Picks Ass't P. A.

John C. Fisher has been promoted to the position of assistant purchasing agent for Chemstrand Corporation, Decatur, Ala. Mr. Fisher, who joined Chemstrand in 1951, previously was associated with John W. Galbreath & Co., at Fairfield, Ala.

United States Revenue Returns Details Are Reported for October

Details of collections of miscellaneous internal revenue taxes for October have been issued by the Bureau of Internal Revenue. Among the collections reported by the bureau were the following:—

	October 1954	October 1953
Coconut and other vegetable oils, processed	$185.000	$2,155.000
Diesel oil	987.000	2,008,000
Distilled spirits, domestic excise tax	177,514.000	190,907.000
Distilled spirits, imported excise tax	24,738.000	26,103.000
Gasoline	12,515.000	18,932.000
Lubricating oils	1,067.000	2,640.000
Matches	77.000	671.000
Narcotics, including marihuana and special taxes	62.000	62.000
Silver bullion sales or transfers stamp tax	1.000	1,000
Sugar	784.000	179,000
Toilet preparations, excise tax	4,356.000	8,204.000
Transportation of oil by pipeline	1,714.000	2,279.000

Joseph Anselmi to Make World Tour

Joseph C. Anselmi, president of Nylos Trading Company, New York, will leave at the end of this month for a business trip that will take him around the world. His itinerary includes stops in Italy, India, a few countries in the Far East, Hawaii and the west coast of the United States. In Seoul, Korea, Mr. Anselmi will be present at the opening of fertilizer bids held by the Office of Procurement of the Republic of Korea, which agency is buying 280,000 tons of fertilizer. Nylos is the selling agent for Montecatini Soc. Gen. and Seifa, two of Italy's major chemical firms.

Trade Briefs

Chemical Process Co., San Francisco, has elected Everett Griffin to the board of directors.

National Polychemicals, Inc., Wilmington, Mass., has appointed Peter W. Walkinshaw plant superintendent.

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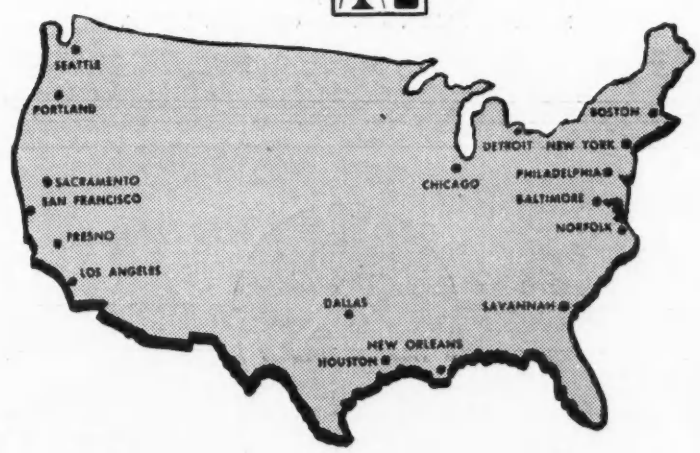

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Silicones for Cosmetic Use A New Development at GE

Development of a new family of silicones, designed for use in common cosmetic products, has been announced by General Electric Company's silicone products department. Designated "Velvasil" silicones, the new chemicals are said to permit a sharp increase in water repellency and protective action against detergents and many other common waterborne irritants.

The silicones are commercially available in a wide range of viscosities. T. H. Reilly, sales development supervisor of consumer applications, said that "Velvasil" silicones can be readily incorporated into typical cosmetic formulations, without entailing revolutionary new manufacturing processes or equipment. They are expected to find widespread use in such specialties as hand creams, lipstick, hair dressings, cold creams and lotions, according to Mr. Reilly.

Chemical Buyers Told

—Continued from page 7

pany, totals up the figures he has obtained, puts that together with the information he has obtained and is then able to say with confidence that the national market is such and such, his own company's purchases are this percentage, the principal using industries are these and those, and thus he has completed a market study of the material."

Chemical packaging costs were analyzed by W. F. Schoenthaler, manager of Shell Chemical Corporation's distribution department, New York. Pointing out that packaging, at best, is not an exact science, Mr. Schoenthaler said that the chemical industry has several major worries in this connection—weight, degree of corrosiveness, toxicity and flammability of a product.

Role of Bureau of Explosives

The industry, he went on, looks to the Bureau of Explosives for guidance, since the bureau recommends regulations to the Interstate Commerce Commission. He also pointed out that a container, to be commercially successful, must gain consumer acceptance, since the consumer is the one who ultimately bears the cost. Other factors he touched on were filling and handling costs, transportation expenses, container size, warehouse and the problem of packages vs. bulk.

S. E. Spencer, jr., purchasing agent for Wm. S. Merrell Company, Cincinnati, Ohio, declared that he was not worried by the influx of foreign chemicals into this country. He said that he found it hard to believe that the chemical industry, which produced some $20,000,000,000 worth of chemicals in 1954, was in any real danger from foreign competition.

He called upon chemical producers to spend less time in fighting a few imports and more in developing new production technics or better competitive products where imports are a threat. Ultimately, Mr. Spencer conceded, American producers generally meet threats from abroad by lowering prices.

The speaker maintained that it is a matter of self-interest on three counts for a P. A. to keep international competition active. For one thing, he said, a purchasing agent should try in any legitimate way possible to lower his company's costs. As an American taxpayer, he went on, free trade is also a matter of self-interest. Finally, he said, as a citizen of the free world, free trade should be favored.

The packaging committee of the American Drug Manufacturers Association, which conducted a small segment of the one-day parley, reported that it has decided to concentrate on circulating information to its members, rather than continuing its efforts to promote the development of new or re-designed packages with the container industry.

W. W. Phillips, manager of the raw materials handling department of Eli Lilly & Co., Indianapolis, Ind., gave a detailed account of the difficulties encountered in trying to get container makers to modify their packages. The reaction, he said, was generally against making any creative effort on their own initiative. In fact, Mr. Phillips added, packagers show almost as much resistance to standardizing their products as pharmaceutical makers do toward standardizing their drug preparations.

APMA's Central Section

—Continued from page 7

will hold round tables during the afternoon. These will consider export marketing problems, market research and advertising. Moderators will be A. Aerne, of Hobert Laboratories; Alfred W. Hubbard, of *Modern Medicine*, and John F. Gallaway of Pitman-Moore Company.

The final day will be devoted entirely to marketing problems. Among the speakers will be Parker H. Heath, of Irwin, Neisler & Co. and Verne Martin, retired sales manager of Maytag Company, who will speak on "Men Make the Difference." Sales supervision will be the subject of Gordon P. Lovell, director of visual education, International Business Machines Corporation.

The controversy between duplication and substitution will be discussed by Walter Cousins, jr., publisher of the *Southern Pharmaceutical Journal*, and Robert E. Abrams, assistant professor of practical pharmacy, Philadelphia College of Pharmacy and Science.

Others who will speak at the meeting will include Robert A. Hardt, of Hoffman-LaRoche, Inc., president of the association; Dr. Irving J. Lee, who will present "The Semantics of Communication"; Francis Chilson, and Tom Duggan, news and sports commentator.

Eastern Pest Control

—Continued from page 7

sented:—"Problems Posed by Profitless Pests," by Dr. E. H. Wheeler, of the University of Massachusetts; "Biology—Habits and Behavior of Certain 'Low Profit' Pests," by Dr. J. B. Schmitt, of Rutgers University; and "What the Pest Control Industry Should and Could Do About Them," by Dr. Neely Turner, entomologist with the Connecticut Agricultural Experiment Station. The annual banquet will be held during the evening.

At a forum on the closing day, Dr. B. V. Travis, of Cornell University, will speak on fly control. This will be followed by the inspection and demonstration of new equipment.

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Textile and Leather Chemicals

Trading in textile and leather chemicals slackened last week and reverted to small lot buying for immediate requirements. Earlier in the month a good volume of business was placed for prompt and forward delivery in many items. Prices of materials ruled steady at current levels. Higher cost of eggs and improved demand for flake egg albumin strengthened the market and quotations were lifted 5 cents per pound, while the technical grade was reduced 10 cents because of heavy stocks and slow demand.

Production of potato starch was still limited owing to scarcity of potatoes for immediate delivery. Farmers withheld stocks from the market, and awaited the government's action on the subsidy for potatoes. Starch prices were maintained at prevailing levels. Trading in tapioca flour was limited for shipment from primary sources, while fairly active for immediate needs. Quotations were steady and quotably unchanged.

Fiber consumption on woolen and worsted systems during November was 7 percent below October, but 8 percent above November last year, according to the Census Bureau. The weekly average raw wool consumption totaled 7,047,000 pounds, scoured basis, 4 percent less than October, but 1 percent above November, 1953, while consumption of carpet class was 3 percent lower than October and 1 percent larger in November last year. Apparel class wool consumption dropped 5 percent from October but was 1 percent above November, 1953.

Because of recent increased estimates in the United States, Mexico and Pakistan, free world cotton production has been placed at 28,500,000 bales, according to the International Cotton Advisory Committee. This represents an increase of about 700,000 bales over the previous estimate and compares with 30,000,000 bales produced in 1953-54. Despite the decline in production from a year ago, the free world supply, at 46,300,000 bales, will be at the highest postwar level. About half of this total is in the United States. So far this season, aggregate free world consumption appears to be running a little higher than last season. In the United States, consumption showed a normal seasonal rise in November but for the first four months of the season, was still about 100,000 bales under a year earlier.

Price Trends

Advanced

Egg albumin, flake, 5c. per lb.

Reduced

Egg albumin, tech., 10c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
94.08	94.08	94.08	97.89

(For Current Prices see page 9)

Chemicals

Bichromates—Market remained steady at prevailing quotations. Deliveries against contracts moved in good volume. Stocks of all grades were ample.

Hydrogen Peroxide—Good demand was reported for 35 percent grade from the textile and paper industries. Prices were held at 18c. per pound, tankcars, 20.2c. per pound, drums, carlots and 21.1c. for smaller quantities, delivered.

Sodium Acetate—Moderate demand was noted for delivery against former orders. Quotations were without change.

Sodium Hydrosulfite—Buying interest was quite active for prompt needs. Prices were maintained at former levels. Drums were held at 20c. per pound, carlots, freight allowed and 21½c. for lesser quantities.

Sulfonated Oils—Business was reported as fair for prompt requirements. All varieties were quotably unchanged and steady.

Sizing Materials

Corn Dextrin—Trading improved for immediate delivery. Prices continued steady for all grades. Gum was quoted at $8.95 per 100 pounds, paper bags, carlots, New York delivery; canary $8.69 dark $8.79, and white $8.53, same basis. Less carlots were 15c. per 100 pounds more.

Corn Starch—Increased consuming was reported for immediate and later needs. Market was quotably unchanged and steady. Pearl was quoted at $7.14 per 100 pounds, paper bags, carlots, and powder, $7.29 per 100 pounds, New York basis. Smaller quantities were 15c. per 100 pounds higher. Visible corn supply was lower, declining 196,000 bushels to 49,786,000 bushels for the week ending January 14, against 36,132,000 bushels for the corresponding week last year, according to the Chicago Board of Trade.

Egg Albumin—Improved consuming demand for flake and firmer eggs stiffened this grade and prices were lifted 5c. per pound. Flake was advanced to $1.35 to $1.37 per pound and powder, $1.39 to $1.41 per pound, depending upon quantity. While flake was higher, the technical grade was sharply reduced to 76c. to 78c. per pound, spot, as to quantity in some quarters.

Egg Yolk—Strength of eggs also created a firmer tone in this market and quotations were lifted 2c. per pound in some directions. Demand was fairly active for prompt delivery. Stocks on spot ranged from $1.02 to $1.06 per pound, according to seller and quantity.

Potato Starch—Consuming demand was reported spotty, chiefly for immediate delivery. Production was still limited, owing to scarcity of available supplies of culls. Farmers continued to hold back stocks of lower grades from the market, preferring to await the government's decision on their request for a subsidy on potatoes. Prices were steady at 6c. per pound, carlots, f.o.b. mills, Maine, for prompt delivery. The Idaho market was unchanged at 6¾c. per pound, carlots, mills, less ½c. per pound for shipment to eastern points. Stocks on the spot were maintained at 8c. to 8½c. per pound, exwarehouse, according to quantity.

Tapioca Flour—While trading was limited this market remained steady at prevailing quotations. Shipments of AAA Java were held at 5.85c. to 5.90c. per pound, carlots, exdock, and Siamese was unchanged at 5½c. to 7c. per pound, same basis, as to quality. Interest in Brazilian was slow and replacements were merely nominal at 7¼c. per pound, carlots, exdock. Good quality Siamese on spot was unchanged at 7½c. to 7¾c. per pound exwarehouse and Brazilian at 8½c. to 9c. per pound, as to quantity.

Tanning Materials

Chestnut Extract—Consuming demand continued restricted to actual needs. All grades were quotably unchanged. Liquid 25 percent tannin was quoted at 4c. per pound, tankcars, f.o.b. works; 4¾c. per pound, barrels, carlots, and 5.10c. barrels, less carlots; powdered 60 percent tannin 10.32c. per pound, bags, carlots, and 11.02c. bags, less carlots, same basis.

Cutch—Inquiry improved for replacements. Prompt shipment was maintained at 8½c. per pound, exdock, plus duty. Offers were light.

Mangrove Bark—Trading was quiet. Shipments were maintained at former levels. African bark was quoted at $68 per ton, exdock, for prompt shipment and Colombian at $58 per ton, same basis.

Myrobalans—Interest in replacements was improved, but trading was still light. JI's assorted were quoted at $54 per ton, exdock; ordinary, $43 to $44 per ton and crushed JI's, $63 to $65 per ton, same basis. Solid extract, 55 percent tannin was offered at 7¼c. per pound, exdock, plus duty and 50 percent 7c., same basis.

Quebracho Extract—Buying interest for nearby shipment has improved, though trading was reported spotty. Prices were unchanged and steady. Solid ordinary guaranteed 63 percent tannin was quoted at 11 21/32c. per pound, exdock, plus duty, and clarified, 64 percent at 12 23/64c. per pound, same basis.

Valonia—Consuming inquiry continued to lag. Offers for shipment were quite liberal at former levels. Beards were offered at $56 per ton, exdock, prompt shipment and cups, $44 per ton, same basis. Extract, 63 percent tannin was held at 8c. per pound, exdock, plus duty.

Wattle — Trading was reported light, and confined to nearby shipment. Prices of all grades were unchanged. Fair average bark was held at $98 per ton, exdock, and merchantable at $94 per ton, same basis. East African extract, 60 percent tannin was offered at 9¾c. per pound, exdock, plus duty, South African at 10c. per pound, same basis.

For Late Market Developments, See Page 4

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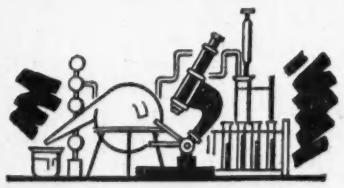

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Amine 2,4-D Concentrate (6 lb./gal.)
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Agricultural Chemicals

Inorganic fertilizers were unchanged in price last week, with most listings judged firm by producers. Most materials moved out in increased volume both for mixing and direct application. Anhydrous ammonia sales picked up steadily, with producers anticipating a good year for consumption. The recent authorization of $17,500,000 for Korea requiring $15,000,000 for nitrogenous fertilizers and $2,500,000 for phosphatic materials was not expected to arouse much interest among producers in this country, due to the fact that there would be heavy commitments to the domestic market during the peak season.

Nitrogen solutions and urea moved out to consumers in good volume. Animal meals showed varied activity. Dried blood was decreased in price in New York due to lack of demand. However, midwestern inquiry sent prices up in Chicago. Scarce offerings of bonemeal in the face of active demand sent prices up. Castor pomace offerings were practically nil, and the market was nominally higher. Fishmeal and scrap declined on spot. Tankage prices were unchanged in New York, but higher in Chicago.

The GSA continued to award contracts for overseas delivery of DDT from time to time. Otherwise, reports varied as to consumer activity in the market. Herbicides were quiet. The Middle East and Africa showed some interest, but South American inquiry tapered seasonally. Calcium cyanide moved fairly well, with 1955 business expected to equal or surpass 1954 levels.

Animal and Plant Foods

Ammonia, Anhydrous—Fertilizer grade continued unchanged at $85 to $88 per ton, tankcars, works, freight equalized. Market prospects looked good to most sources, who pointed to the USDA reports that there was an estimated increased of 44 percent in consumption of anhydrous ammonia during the year ending June 30, 1954. The department also predicted that there would be a further increase of 9 percent in use during the current fertilizer year.

Ammonium Sulfate—Producers moved stocks to mixing plants in heavier quantity over the week, as stocks were readied for the coming spring and summer season. Prices held steady and unchanged for all types. Supplies were ample. Recent shipments under FOA authorization to Korea helped producers by removing from storage a large block of material.

The recent announcement by FOA of allotment to Korea of a further sum of $17,500,000 for purchase of fertilizers was not expected to have too much effect on the American market, due to the fact that producers here would be largely taken up with satisfying domestic requirements. Expiration date of the bids was set for June 30, with deliveries ending September 30. It was reported that some $15,000,000 worth of nitrogenous and $2,500,000 of phosphatic fertilizers would be required.

Blood, Dried—Demand varied as to consuming area. Dried blood was offered at $6.50 per unit-ton, f.o.b. New York, off 25c. However, buying interest improved in the midwest, both for stockfeed and fertilizer. As a result, prices rose 25c. per ton to a new quotation of $7 per unit-ton, f.o.b. Chicago.

Bonemeal—More active demand in the face of short offerings boosted prices $2 per ton. Material was quoted at $70 per ton, f.o.b. New York, with the market firm.

Castor Pomace—There was little or no material offered due to lack of bean imports for crushing. The market was entirely nominal and higher by $2.50 per ton. Pomace was quoted at $37.50 per ton, as one producer withdrew quotations of $35 per ton earlier.

Fishmeal — Consuming demand was more active, but prices for meal and scrap were lower last week. Market remained nominal at $146 per ton, f.o.b. Baltimore area for meal, and $141 per ton for scrap, same basis. The Bureau of Fish and Wildlife service report as that production of fishmeals in November totaled 9,243 tons, as compared with 5,601 tons in November, 1953. Total production for the first eleven months of 1954 amounted to 218,662 tons, as against 217,301 tons for the first eleven months of 1953.

Phosphate Rock — Prices of both Curacao and domestic rock were unchanged and steady last week. Demand was up for application and some mixing business was reported. Acidulators also were active. Supplies were ample.

Potassium Muriate—Last week it was reported that imports in recent weeks had been negligible, and that the present situation was one of fairly even balance. Domestic inquiry improved in anticipation of the coming peak season. One source said that the U. S. had recently sold some 18,000 tons of potash to Japan. This was the first sale of such material to the Japanese since the war. The international potash situation appeared satisfactory to most observers, who pointed out that current demand was balancing out the supply situation.

Superphosphate—Buying interest continued to pick up last week. Although supplies of both normal and triple were regarded as lengthy it was felt that triple was currently in a better position than normal in that demand had picked up rapidly, particularly from acidulators. Normal also moved out well, as consumers made a sizable dent in heavy supplies. Prices were unchanged and steady.

Tankage—Continuing fairly heavy meat production was met by heavy tankage demand. Prices were unchanged in New York, as material remained quoted at $6 per unit-ton. However, demand in the midwest for fertilizer and stockfeed requirements sent prices up to $7 per unit-ton, f.o.b. Chicago.

Price Trends

Advanced

Blood, dried, Chicago, 25c. per unit-ton.
Bonemeal, $2 per ton.
Castor pomace, $2.50 per ton.
Tankage, Chicago, 25c. per unit-ton.

Reduced

Blood, dried, N. Y., 25c. per unit-ton.
Fishmeal, $4 per ton.
Scrap, $4 per ton.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 22 1954
109.58	110.18	109.50	111.23

(*For Current Prices see page 9*)

Los Angeles Market

Los Angeles. — Compared to peak trading periods, current business was extremely slow; however, compared to the same month for the preceding two years, business the first part of this month has been exceptionally good. A further increase in sales volume was expected for February and March. Suppliers were pushing for more February delivery schedules in order to relieve the shipping problems that always occur in March, April and May. Quotations remained firm this week with only small increase noted for organic items. Fish meals continued to firm with production of domestic meal very light; trading reported on estimated production at $2.65 per unit of protein. Canadian herring meal jumped from $2.25 per unit to $2.40 per unit with supplies limited. Castor pomace is expected to be available by February, having been off the market the past several months. Quotations will run close to $40 per ton which was the last sales price.

Pesticides

Reports varied as to the present status of the market. Some producers reported good formulation business for anticipated needs, while others did not notice much of a pickup in sales as yet, pointing out that farmers were usually reluctant to make purchases until late in the spring. Some export activity was reported in the Middle East and Africa, while demand in South America was quiet. The navy was also in the market for some material for distribution at various naval stations. The GSA continued to award contracts for delivery of 16,596,000 pounds of DDT. While production capacity remained well ahead of current demand, producers reported that foreign business was taking a more important role in insecticides than previously. The export market was expected to grow steadily for some time, due primarily to government aid to underdeveloped countries.

Calcium cyanide was reported to have sold very well as a grain fumigant during 1954, and from what producers could determine, it looked as if 1955 would be equally as good. Malathion moved out actively during December and the forepart of January to formulators at unchanged prices. A fair volume of sales was reported for parathion at the recently lowered prices. Aldrin and dieldrin sales picked up last week, largely for formulation business. In nearly all cases plentiful supplies were reported.

For Late Market Developments, See Page 4

USI Resins Sales Manager

Vincent McCarthy has been appointed sales manager of "Petrothene" polyethylene resins for U. S. Industrial Chemicals Company, division of National Distillers Products Corporation, New York. For the past three years Mr. McCarthy has been sales manager of exturded polyethlene products for Gering Products, Inc., Kenilworth, N. J. For eight years before this, he was with E. I. duPont de Nemours & Co., wilmington, Del., in direct sales and sales promotion, mainly for polyethylene resins.

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Perfumers to Air Problems At First Open Symposium

The first open symposium on perfume to be held by the American Society of Perfumers will take place March 16 at the Advertising Club, New York. The discussion will deal with perfume questions of interest to perfumers, chemists, management, and consumers.

Frazer V. Sinclair, honorary member of the American Society of Perfumers, will moderate the discussion. The technical discussion will be followed by a cocktail hour at 6 p.m. and a dinner at 6:45 p.m. Dr. Oliver L. Marton is chairman of the prog:am, assisted by Pierre Bouillette, Everett Kilmer, Walter Longsfelder and Ernest Shiftan.

Gauging Manual Material Revised by Tax Division

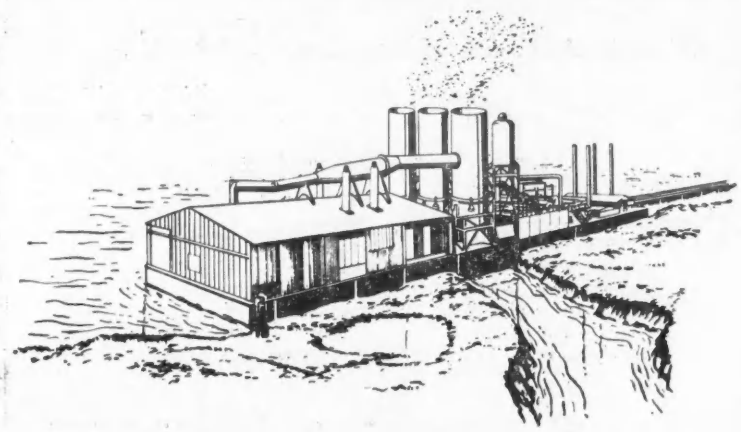
The alcohol and tobacco tax division of the Internal Revenue Service has announced that the text material of the gauging manual has been revised to conform to citations of the Internal Revenue Code of 1954 and to authorize the director of the alcohol and tobacco tax division, to approve gauging devices. No change has been made in the tables of part 186 and no reprints of the entire manual are expected to be made until the present stock is exhausted.

Ammonium Phosphate Unit Work Is Started by Brea

A 210,000-gallon ammonium phosphate production unit for the manufacture and distribution of a new phosphate fertilizer solution is now under construction at Fresno, Calif., by Brea Chemicals, Inc., subsidiary of Union Oil Company of California. An adjunct to Brea's 2,310,000-gallon Aqua Ammonia distribution terminal at Fresno, the new facility will handle the production of aqua ammonium phosphate as a source of phosphate.

Smico Acquires Wolf Co.

Smico, Inc., Oklahoma City, Okla., has announced the acquisition of the complete milling and processing business of Wolf Company, Chambersburg, Pa. Wolf was established in 1879 and manufactures mill and processing equipment.



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Industrial Organic Chemicals

Refined fusel oil was advanced 5 cents per pound last week, followed by similar increases for fermentation amyl acetate and isoamyl alcohol. Producers indicated that there was no improvement in the supply of these materials. Crude fusel oil is expected to continue to remain scarce.

The price pattern of other organic chemicals was relatively steady. Producers were moving a good volume of material to many outlets, in line with overall business trends. Somewhat puzzling, has been a slight fall-off of demand for many solvents. The solvent call was expectionally good in December. Some producers, expecting demand to hold up at those rates, have not seen quite as much interest. However, hope was still held out that the end of the month would bring a little more action. One possible answer was seen in some reduction of export demand. The calls for export in recent months have been quite good, but the level was receding a bit.

Acetone prices were holding up without any undue strain. Trade sources indicated that there was still some of the weakness present in the market as more production became available. However, most of the tankcar business was being done at market levels. The alcohol price was fairly firm at present quotations. Butyl alcohol was still moving at a good rate.

Among the amines, dibutylamine and diethylamine moved very well with the stepped up activity in the rubber industry. Sales of ethanolamines held up very well. Diethyl ethanolamine was selling well in many directions. Monoisopropylamine was picking up good outlets with expanding industrial interest.

Ethylene and propylene oxides were moving very nicely, producers said. There was ample production capacity, but what was being made, was being sold. The glycols derived from these oxides were moving quite well generally. The entire price picture of these glycols, oxides and amines was firmer. But, no changes were contemplated. Hexylene glycol also moved well.

Formaldehyde and paraformaldehyde were moving to a good demand. Industrial call and some deicing uses for methanol have provided excellent sales. Refined glycerine demand was sustained. Supplies were a bit pinched, but consumers were not being hurt, it was said. Crude glycerine was still short.

Acetone—No revisions in price schedules were noted or anticipated. Producers indicated that they continued to move most of their production at regular market levels without any difficulty. There was still an occasional report of price shading for large volume accounts in local areas. But, most of the tankcar business was felt to be at 7½c. per pound.

The competition in the acetone market from cumene phenol processes in operation has been the largest factor in weakening the market in the past year. Demand since mid-year of 1954 has remained at a relatively good level. Many suppliers who do not have a great deal of output have experienced virtually no trouble in moving their production right out to contract customers. It was generally where new business or substantially larger orders were envolved that competition grew keenest. In the past several months government orders have precipitated some price shading in order to get the contract.

With more production on the market from cumene, trade sources expected that stocks would become more ample, if phenol business expanded. The phenol market has gradually improved, but the volume was still short of total production capacity. Hence, it was fairly certain that for now, at least, there would not be as much acetone available from this direction as total capacity would indicate. The level of phenol production maintained to meet resins and adhesives demand, will have much influence in determining how much surplus acetone is around in coming months, it was felt.

Alcohol—Producers related that the market has been fairly firm. The price structure was said to be definitely stronger than it was in the early part of last year. But, there has not been enough strength recovered to lead members of the trade to look for an increase.

Amyl Acetate—The price of fermentation material advanced as refined fusel oil prices came up in a move started in early November. Quotations of the ester were 5c. per pound higher by this move. Current schedules of fermentation material were at 20c. per pound in tankcars, 22c. per pound in carlots, and 23c. per pound in less than carlots.

There have been no changes in schedules of synthetic material derived from pentane. It was said that there has been a fairly good movement of the synthetic grades. The technical material moved well to lacquer outlets where it is frequently used in formulations with acetone, it was said. In general, domestic business has held up quite well. There had been quite a bit of export demand in the past few months, and suppliers presently indicate that the call was not quite as strong from that direction. Fermentation amyl acetate has been in very short supply for a long time due to the scarcity of fusel oil.

Amyl Alcohol—A shortage of material derived from fusel oil still existed. However, increased costs of raw materials and heavy demand have pushed up prices of refined fusel oil and isoamyl alcohol.

Synthetic amyl alcohols derived from pentane continued to hold up to a very good pace. Producers related that mixed amyls and primary amyl were doing very nicely. There has been a slight letdown of export interest, but domestic business continued to retain its strength. Suppliers were meeting all needs of synthetic amyl alcohol, it was reported.

A synthetic alcohol of technical grade was recently introduced and it has been shown good interest, the producer states. The material currently undergoing testing procedures by consumers is available in tankcar quantities at 13c. per pound on a delivered basis.

Butyl Alcohol—Demand has held up very well. Producers were moving their production right along to fill incoming orders. Demand was said to have improved during the past several months and further improvement has been seen since the start of the year. Sales were in the direction of synthetic resins, lacquers and plasticizers. Prices were regarded as firm at current postings. There was ample production to take care of present consumption levels.

Dibutylamine—This market was very active. A good pickup in demand was seen after the resumption of activity in the rubber industry. Movement of dibutylamine has been largely to foam rubber latexes where it is used as an intermediate in the production of an ultra accelerator, it was said.

Although the volume of business has been very good and was expected to hold up quite well, producers indicated that there was ample production capacity to take care of all expected orders. Prices were reported to be firm at current levels.

Diethanolamine — Producers reported that they have experienced a very good demand for this amine and its related isomers. Sales have held to a good pace through the last several months and suppliers were looking for the call to hold up. Prices were regarded as being firm at current levels.

There has been nothing to indicate that any revisions were to be anticipated, one way or the other. It is known that producers regarded the profit margin for the ethanolamines and some of the related oxides and glycols as being rather slim. Price weakness early last year forced the

This market reports on industrial aliphatic organic chemicals. Reports on industrial aromatic organics may be found in the Coal Chemicals market, while reports on fine and rare organic chemicals appear in the Drugs, Fine Chemicals, Botanicals market.

Price Trends

Advanced

Amyl acetate, ferment., 5c. per lb.
Fusel oil, refd., 5c. per lb.

Reduced

None

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month
130.53	130.43	130.43

(*For Current Prices see page 9*)

For Late Market Developments, See Page 4

quotations down to an uneconomic point. Some of that ground was regained by the 1½c. rise last October. But the margin still does not entirely satisfy some sources.

Diethylamine—A good demand for use in the rubber industry for use as an intermediate kept activity up to a good pace. Producers expected demand from end-use in the foam rubber field would be well sustained.

This material competes with the butyl isomer in output of an accelerator, but there was an ample market for both amines to keep active there. Expansion of the latexes in the foam rubber field has been of substantial volume and further increases were expected. Price schedules of diethylamine were firm at former listings. Enough production was obtainable to take care of needs.

Diethyl Ethanolamine—Producers indicated that this amine was enjoying a good call from a fairly wide scope of demand. More and more interest was developing for use in the emulsion field of floor waxes. There has been a steady demand from pharmaceuticals. The amine is used in production of procaine penicillin. Although there aren't extreme fluctuations in buying from this outlet according to seasonal influences, it was said, the fact that this was currently a good period for penicillin kept the amine's sales moving in that direction. There also has been some interest for newer industrial applications for diethyl ethanolamine.

Ethylene Oxide—There was still a lot more capacity than demand in this market. However, producers have been moving a good volume right along and were inclined to look at the oxides a little more optimistically than a year ago. A steady demand has sustained activity for ethylene oxide and its glycol and amine derivatives since the end of summer last year.

Formaldehyde — Prices were steady where they have been for the past few weeks. Producers related that demand was good. Several sources said that they were moving their output right out to fill orders. There was ample production and stocks to meet the needs of consumers.

Fusel Oil—Increased costs finally eliminated the range of prices carried by OPD last week. Schedules for refined fusel oil were advanced 5c. per pound, bringing all quotations up to the same level. The price was now 20c. per pound in tankcars, 22c. per pound in drum carlots and 23c. per pound in less than carlots. Despite the advance, there was no indication that there was any more material available. Producers did not see any immediate relief of the scarcity of this item.

Glycerine—Producers of refined material report that demand has held up very well. Sales were good in most consuming outlets. Paint producers who are supplying finishes for automobiles were enjoying a period of very high activity with car production running so well. The total call from all directions was enough to create a little tightness in the market. However, producers reported that consumers who have been taking their normal contract commitments were not finding any difficulty getting the material they needed.

It was demand in excess of normal levels where consumers turned to other sources of supply that led buyers into difficulty. There just was not a great deal of excess material available, producers said. Suppliers were quick to add that they have been able to keep abreast of their regular commitments, with current production schedules.

Out of the current situation in the market some facts have become clear. First, consumer inventories were not very high. Producers indicated that most consumers were asking for fairly quick deliveries. Further, when consumer's own orders started to move up, they were quickly reflected in the call for glycerine. It was also seen that there was a little scare buying in the present market. Producers related that they felt it was unnecessary. Then too, the shortage of crudes was still noticeable in the market.

Purchases of Argentine crude last week resulted in American buyers being outbid once again. Suppliers have indicated that there was some disappointment here because the volume was enough to have been of some help to the market if the price hadn't been out of reach of the domestic market. Soaping operations here have not produced enough crude glycerine to meet all requests from refiners and no significant change in production levels was anticipated. Price schedules for crude were firm and unaltered.

Hexylene Glycol—This polyol moved out well at a fairly consistent pace. Demand from brake fluids for automobiles has been quite good. There also has been a steady call from cutting oil operations where hexylene glycol is used as a coupling agent.

Prices were very firm at levels attained last October. No particular revisions were expected for quotations. Supplies have been adequate to take care of consumption requirements.

Isoamyl Alcohol—Prices were increased for this material because of the higher costs of fusel oil. The move effective last week did not alter the fact that isoamyl is still in very short supply. Quotations of the fermentation material, 128° to 132° C., were now at 32c. per pound in tankcars, 34c. per pound in carlots and 35c. per pound in l.c.l. quantities, all on a freight allowed east basis.

Methanol—Producers enjoyed an excellent industrial demand. Sales for formaldehyde have held up very well. It was anticipated that the demand for resins would keep formaldehyde going right along, an thus, hold up the call for methanol. The cold weather has also maintained a good use of methanol in gasoline deicing operations. Price schedules were firm at former listings no revisions were anticipated.

Methyl Ethyl Ketone—The market was reported to be very firm, pricewise. However, no advances were expected to take place. Demand in December was considerably better than early estimates indicated sales were going to be. Surprisingly enough, some producers related that orders so far this month have not quite come up to anticipated levels.

There definitely was not a weakening to a large degree, but sales were slower than the excellent level attained last month, a source said. A slight pickup of momentum was still looked for in these last two weeks of the month. Where there was any slowing down for solvents, it was more or less general. No particular area could be pointed out as slower than any others. One or two uses for MEK, such as lube oil dewaxing, have held up to a very steady pace.

Methyl Isobutyl Ketone—Demand for this solvent continued to move production out at a very good level. Current sales were not quite up to the levels of December, which was a very good sales month. Some producers indicated that the cutbacks in January were general for solvents, but were probably only a temporary situation. A little pickup in buying interest was looked for towards the end of the month. Prices were considered firm at presently quoted levels. Production was ample for consumer requirements.

Monoisopropylamine — Trade sources said that a good volume of business was being done for this amine. Demand was reported to have picked up rather well, including some new uses. One such outlet is in the manufacture of inorganic salts where the amine is used as a selective solvent.

Paraformaldehyde—There have been no changes in this market. Producers were moving their production right out at the same prices that have been previously announced. Demand was generally felt to be good. Supplies were sufficient for the call.

Pentaerythritol—Producers related that demand for this material was holding up quite well. Consumption was capable of moving along what was currently being produced. A few makers have felt enough increase in buying interest in recent weeks to feel encouraged about the outlook of the market. Demand from synthetic resins was expected to hold up quite well. Prices were firm without change.

Propylene Glycol—Producers related that the market continued to do very well. Demand from synthetic resins and other outlets held up quite well. The price was considered firm at its current position. Production capacity was ample to take care of all anticipated needs.

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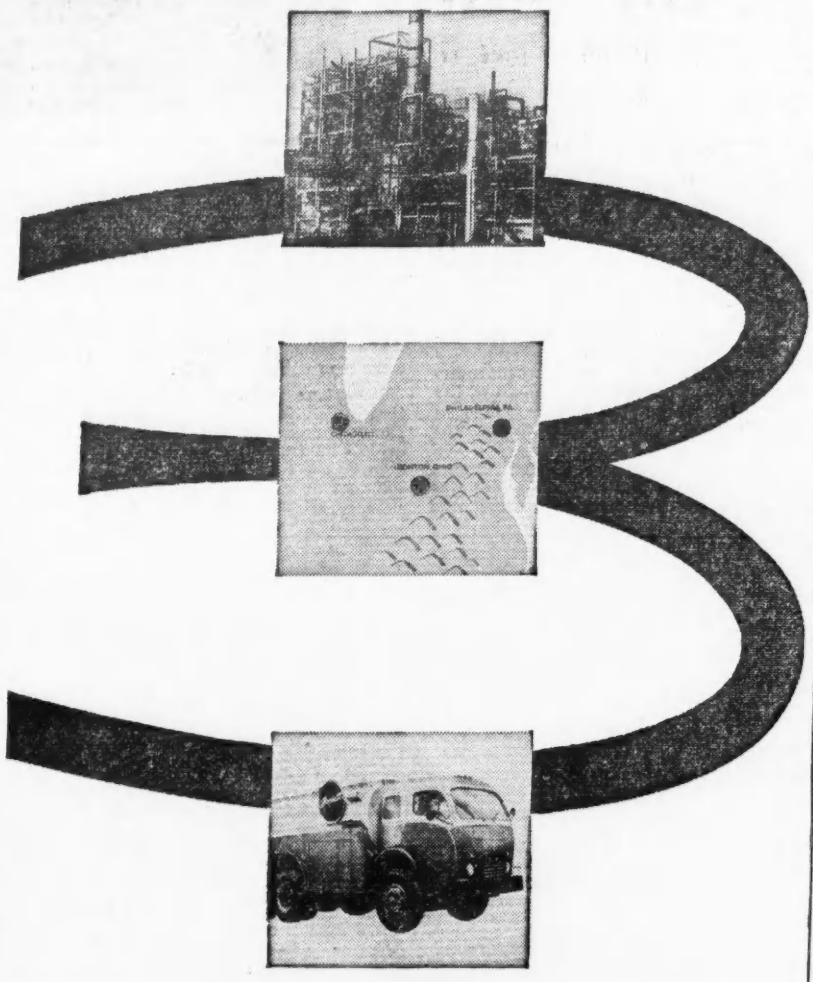

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Coal Chemicals

Price schedules were retained last week. Trade sources did not indicate any specific materials which were likely to change in price. The revisions that came about at the end of the year and in the first two weeks were now a part of the price structure and the market was settling down to the business of supplying expanding consumer needs.

Demand has not surged ahead, but, buying interest was good and getting better in many directions. Benzol was moving at a steady pace to several different consuming outlets. Tar acids continued to enjoy a very good call. Requests for m-p-cresol were especially good. There has been enough interest in o-cresol to move a satisfactory volume. Phenol from resins and adhesives was building up gradually. There was ample supply to handle the call.

Demand for phthalic anhydride has moved ahead with a little spurt. The position of some producers was tightening. Aniline sales were up. Trade sources related good call from textiles for dyestuff intermediates and a good pace for chemicals moving to the rubber industry. Many sources related that the general outlook was more optimistic.

Steel operations during the week ending January 23 were scheduled to be at 82.4 percent of theoretical capacity or an index rating of 123.8, according to the American Iron and Steel Institute. This was equivalent to 1,989,000 tons of ingots, compared with 2,007,000 tons actually produced the previous week, and 1,766,000 tons turned out one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
114.61	114.54	114.59	114.56

(For Current Prices see page 9)

Basic Products

Benzol—A generally better tone to business was seen by many producers of aromatics. Demand from several areas was showing signs of picking up. Other outlets were already moving production along at a good pace.

Trade sources were looking for a relatively good call for benzol from synthetic rubber, particularly in this quarter because requirements are already known. Orders for March are substantially higher than previous months. Sales of synthetic phenol were holding up fairly well. Demand has picked up a bit since phenolic resins got moving better. There was a fair movement to the varnish trade. Benzol has been receiving a good call from detergents and from styrene. The styrene went to synthetic rubber outlets and for polystyrene plastics. A boost in benzol needs was anticipated for insecticides. Government requirements for DDT exports have come at a time when domestic business is at a lull.

Prices were regarded as firm at 36c. per gallon. It was felt that the reduction of a few weeks ago has firmed up the price structure and successfully met the threat of competition from imported benzol. The important feature of the new structure was seen in the fact that benzol was now back at levels carried during the period before the 40c. price was established.

Even though a great deal of Iron Curtain benzol is expected to be available because the eastern European market has recovered enough to produce its own consumption needs, domestic producers here did not anticipate any further immediate reaction here. It was felt that domestic consumers were satisfied with the price and have contracted to buy a good deal of benzol at that price. Hence, it was felt that consumers did not have to go out and shop around for low cost benzol.

Coaltar—Producers indicated that coaltar still was not plentiful, by any means. Higher production rates of coking operations were beginning to bring a little more material but no surpluses were expected to be seen for a long time. It was added that whatever coaltar there was around will be needed when consumption of pitch climbs back up.

Creosote—Demand has not changed greatly. A number of sources were anticipating a little improvement because of the better financial status of railroads and because some scattered buying has indicated consumer stocks are not large. It was added that some trade people were not looking for any immediate pickup because they were looking at the normal chain of events that must take place before increased demand is felt by creosote.

After railroads decide to increase maintenance operations and start to buy more ties, the wood is seasoned for several months. The length of seasoning is sometimes determined by how tight ties were getting. These associated factors figure in the final picture of the market. Prices were firm at previous listings.

Cresols—A continued good demand sparked activity for the tar acids. Producers related that overall call for meta-para isomers was beyond what was available currently. The call for cresols has been good, not only from tricresyl phosphate, but, also from cresylic resins, wire enamels and some from flotation outlets and aircraft engine cleaners.

Evidence that demand from carbon removers has picked up slightly again was seen in call for many tar acid fractions. A source reported that it did not even have any surplus of o-cresol. Other producers have indicated that ortho was available, but not as abundant as it has been in some other years. Discontinued uses of ortho have prevented any real shortages in recent years, it was said. Price schedules of all the cresols remained firm and intact.

Cresylic Acid—Producers related demand for cresylic was quite firm. Domestic makers were selling what they were turning out without difficulty. The call from cresylic resins has improved in line with other resins business and overall activity.

Importers stated that demand for ADF acid continued to hold up very well. There was some material going to engine cleaners. Demand from cresylic resins was good. Sales for wire enamels definitely picked up with the rise in business levels. The automobile industry provides a good outlet for wire enamels and cresylic acid for this use.

Prices have held firm at 75c. per gallon at officially quoted levels. Occasional reports drifted in concerning ADF acid being sold at 75c. less 2 percent, or some other low price. But, this figure was the legitimate level for sale to distributors. Although it was admitted by many suppliers that it could be possible that such sales were also made to consumers, they never could be traced, it was added, because primary sources in Britain would attempt to restrain such movements there-

Cokeoven Output: November

Following are cokeoven production statistics comparing the months of November 1954 and November 1953. Figures for the running total include output from January through November of both years. Data originate from a report to the Bureau of Mines by cokeoven operators and do not indicate production from any other source.

	November 1954	November 1953	Calendar year to date 1954	Calendar year to date 1953
*Benzol:—				
Specification and industrial grades (excluding motor)	13,026,794	14,670,500	126,920,786	162,630,000
*Creosote oil	2,012,242	2,735,400	29,956,446	34,854,000
*Crude chemical oil	2,016,740	2,029,600	20,614,720	22,907,900
*Crude coaltar	62,428,551	67,070,500	647,555,579	769,960,800
Distilled or topped	19,022,273	20,136,100	194,777,893	235,132,100
Burned as fuel	13,814,620	11,098,500	131,282,246	114,654,000
Used otherwise	75,297	89,300	1,567,258	2,235,000
†Naphthalene (crude); solidifying below 79°C.	9,147,904	8,405,000	87,076,306	104,421,300
Pyridine (tar bases):—				
*Crude, dry basis	11,841	41,700	225,071	517,000
†Refined, 2°	49,610	21,600	530,015	1,274,000
*Solvent Naptha:—				
Crude heavy solvent	493,992	582,000	5,266,116	5,540,200
Refined light solvent	29,050	21,000	240,767	264,400
*Toluol:—				
All grades, including nitration and industrial	2,969,461	3,032,200	30,327,015	32,876,700
*Xylol: All grades	867,248	811,300	9,039,348	9,020,500

*Gallons. †Pounds.

For Late Market Developments, See Page 4

Production Estimate

Estimated output of coal chemicals recovered from cokeoven operations during the week ending January 23, was as follows:—

Ammonia liquid, NH_3	lbs.	929,688
Ammonium sulfate	lbs.	33,601,588
Benzol	gals.	3,214,065
Coaltar	gals.	14,742,199
Creosote oil	gals.	823,438
Naphthalene, crude	lbs.	2,271,095
Pyridine, refined	lbs.	23,906
Toluol	gals.	632,188
Xylol	gals.	168,672

by maintaining the 75c. market price. Further, in several reports of price shading in the past have led to disclosure that the acid was off-grade material regularly sold at a lower price.

There was even some feeling that prices could firm up with current activity. However, a number of sources indicated that there would be resistance to an increase too, because the feeling was that the stable price during the past year-and-one-half has contributed to the steadiness of buying activity.

Naphthalene—Domestic producers related that demand for crude material continued to hold up very well. Sales for phthalic anhydride have picked up since the start of the year. A little more crude material was being obtained as the result of increased coking operations. Yet, there was not enough material available to say the supply is at all easy.

Importers said that requests for 78-degree hot-pressed material have diminished since domestic crudes advanced in price and were slightly more available. Price quotations for hot-pressed imported naphthalene still ranged from 5¾c. to 6c. per pound.

Phenol—Demand for natural material was relatively satisfactory. Phenolic resins have improved somewhat and movement of technical grades was up in line with overall tar acid sales.

Producers of USP material indicated that demand for synthetic phenol was reasonably good. There was still a lot more capacity than consumption required. Suppliers expected to keep moving a fair volume of phenol to phenolic resins and adhesives Price schedules were firm at present levels. Trade sources said that there did not seem to be any likelihood of a price cut due to the last reduction for benzol. Synthetic phenol prices underwent reductions last year while benzol remained at 40c. Hence, the price of phenol was felt to be steady.

Pitch—Demand was quite steady. Supplies were not quite as tight as they were a few months back. But, demand was expected to continue to show an increase from now on. Steel operations were picking up, improving call for electrodes. Aluminum business has been strong. Activity for roofing pitches has slackened because of the season. But, the housing and building boom was slated to go right on and no one expects that pace to slacken significantly.

Toluol—Producers continued to find the market for this aromatic unchanged. Prices were firm at previous listings. No revisions were anticipated in the near future. The overall supply of toluol in the market was more than enough to take care of present consumption needs. However, surpluses have not built up to the point where they are a significant burden on producers.

The amount of nitration material that has been going to defense outlets and the material going to fuels were helping to keep the surplus from growing too big. Some toluol was also moving into export channels to relieve current oversupplies. Many trade sources pointed out that the situation was closely similar to conditions during the early part of last year, when price schedules were able to hold up. However, steel operational rates are higher now than they were then, and indications were that they would hold up for a while.

Intermediates

Aniline—Producers have stepped their production up in recent months keeping up with increased calls from textiles and the rubber industry. Dyestuff intermediates have shown encouraging improvement since the first of the year too. Prices were firm and unchanged.

o-Dichlorobenzene—Producers' views of this market varied to some extent. Parts of the market felt that demand was relatively slow. Other suppliers indicated that demand has held up well. Engine cleaner business was not fully what it had been, but there was some outlet for ortho in this direction. Prices were reported to be firm at former listings.

p-Phenyl Phenol—Sales in this market have been going well, suppliers said. Demand from varnishes kept resins derived from the substituted phenol active. Adequate supplies were readily available to take care of present consumer requirements. Prices were firm and unchanged.

Phthalic Anhydride — Demand has picked up since the first of the year. Producers had seen a boost in sales late last year when the automobile industry got into motion. The expansion of sales has continued right up this month. The price was firm without change. Production was ample for consumer needs. But some producers have been put in a little bit tighter position by the heavier calls.

President Asks Modest Rise

—Continued from page 3

$925,250 in the new budget against $933,460 this year; costs of determining pesticide tolerances will amount to $114,400 against $95,500 this year, which marked the beginning of this program.

The citizens' committee appointed to survey the FDA was selected for its interest in civic affairs and knowledge of consumer and industry problems, it was explained by Secretary Hobby. The committee will comprise fourteen members. Regarding the assignment of the committee, Mrs. Hobby said:—

"Great expansion of the food, drug, and cosmetic industries and scientific and technological changes in the methods of processing these commodities have brought with them important changes in the enforcement responsibilities of the Food and Drug Administration. The extent to which our present enforcement program is effective in protecting the consumer, and the amount and kind of enforcement that is necessary to give the maximum amount of protection need to be reexamined. That is the fundamental purpose to which this committee will devote its study."

Following are the members of the committee, which will hold its first meeting in Washington, D. C., February 3:—

Chairman, G. Cullen Thomas, vice-president, General Mills, Inc., Minneapolis, Minn.; Miss Catharine Dennis, president, American Home Economics Association; Mrs. Grace Drexler Nicholas, executive director, General Federation of Women's Clubs; Patrick T. Stone, US District Judge, Wausau, Wis.; Frank W. Abrams, former chairman of the board, Standard Oil Company (New Jersey), New York, and Dr. Harry Dowling, professor of medicine, University of Illinois, Chicago.

Also, Charles Wesley Dunn, president of the Food Law Institute and general counsel of the American Pharmaceutical Manufacturers Association; Robert A. Hardt, APMA president and vice-president of Hoffmann-LaRoche, Inc., Nutley, N. J.; Dr. Leonard A. Maynard, director of Cornell University's School of Nutrition, Ithaca, N. Y.; Lee W. Minton, president, Glass Bottle Blowers Union, American Federation of Labor.

Dr. Charles F. Poe, professor of food and drug chemistry and public health and dean of the University of Colorado's College of Pharmacy, Boulder, Col.; H. N. Riley, executive vice-president of H. J. Heinz Company, Pittsburgh, Pa.; Walter Silbersack, president, American Home Products Corporation, New York, and H. Gregory Thomas, president, Chanel, Inc., New York.

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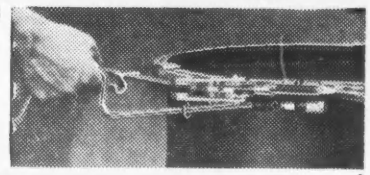

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Drugs, Fine Chemicals, Botanicals

There were no price changes in drugs or fine chemicals last week. There were no significant changes in supply or demand in either drugs or fine chemicals. Citric acid continues to move at an excellent rate according to producers, despite a seasonal decline in its use by the beverage industry. However, other industries were noted to be making increased use of both the acid and esters, it was said. Supplies of citric acid were adequate to accommodate consumer requirements and expected to continue.

Although priced below domestic tartrate quotations, there has been shortage of imported tartrates. The strength of the market in Europe has made it unnecessary for producers abroad to compete in this market. How long this situation will last was conjectural, however. Argols prices have been extremely strong due to the entrance of Russia and her satellite countries into the consumer market. Argols are the raw materials from which tartaric acid and cream of tartar are produced.

The market for caffeine continued at steady levels last week. With the peak season for colds upon us, consumption of cough and cold remedies was expected to maintain a strong demand for caffeine which is itself a primary ingredient in the formulation of these compounds. Synthetic camphor was moving along at a good rate. The synthetic material has all but totally displaced natural camphor although there remains a few applications in which the natural product is considered superior to the synthetic.

The supply situation was good in synthetic camphor but not very encouraging in natural camphor. Production of gum camphor in Japan and Formosa has declined considerably in recent years due to the decline in demand, particularly from this country. Whatever camphor is produced in those areas is being consumed locally or sold to Europe thus leaving little for this market.

The menthol market continued rather discouraging to sellers. There has been very little effort on the part of consumers to buy more than immediate needs since inventories of most of the larger users were said to be comfortable.

Atropine—Demand for atropine alkaloid was small. Consumption of this alkaloid has declined, with more attention being directed toward the sulfate. Supplies of both the alkaloid and its sulfate were reported to be ample to meet consumer needs. Prices were unchanged since last reported.

Caffeine—Demand for caffeine was said to be moving at generally satisfactory levels. This compound is an important component of many analgesic and antipyretic cold formulations and the high incidence of colds during the next few months was expected to maintain demand at strong levels.

Supplies were about adequate for current needs but not excessive. Imports from Germany have dwindled considerably and were no longer considered sufficient to be competitive. Prices were quite firm and expected to continue at least for the balance of the first quarter.

Camphor—Demand for synthetic camphor was reported to be moving at routine levels. Supplies were adequate to meet consumer requirements and prices were firm. Natural camphor was in generally slow demand and consumers who continue to rely on the natural product are relatively few, it was said. Production of natural camphor at source has been small, thus leaving little for export. Stocks of natural camphor in this country were estimated too small although generally adequate to meet inquiry.

Citric Acid—Demand for citric acid continues at firm levels as diversified industrial uses keep consumption steady. Traditionally, the heavy consuming season for citric acid has been during the Spring and Summer months. The development of relatively new uses for citric acid salts such as sodium and barium citrate has been instrumental in taking up the slack in demand during those months when the requirements of the soft drink and foods industries are slow. The use of sodium citrate in nickel plating was said to be increasing. It was reported to offer a practical method of nickel deposition without the use of electricity. A list of outlets for citric acid would have to include beverages, fruit juices, jams, jellies, flavored gelatin powders and in the pharmaceutical field, effervescent alkalizing powders and tablets.

In the beverage field, citric acid is the most popular organic acidulant. Its use has grown steadily with the overall rise in consumption of soft drinks. Jam and jelly manufacturers use citric to insure the presence of enough acid to gel their product.

Flavored gelatin desserts represent a considerable part of the demand for citric in addition to its use in the manufacture of candies. Citric acid consumption by the frozen juice concentrate industry has been increasing and keeping pace with the rise in consumption of frozen foods and juices. In the packaging of frozen fruits, citric acid plays an important role along with ascorbic acid in the prevention of oxidatian, an unwelcome reaction which can cause deterioration in quality. These and other uses were expected to continue to grow in pace with the increase in consumption.

Menthol — The spot market remained unchanged last week. Demand was spotty as consumers maintained a policy of buying for immediate needs rather than on contract. Most of the larger consumers of natural menthol were said to have built up their inventories last year when prices hit $5 on the Brazilian material. Various factors are at work which tend to cloud the longer term outlook in menthol. Fall buying of this product proved highly disappointing. While shipping prices from Japan and Brazil have been firm, there was a tendency to shade duty paid prices for spot goods, especially the natural product from Brazil. Some trial shipments of synthetic material have been made from Germany, and there were complaints heard in the market that sellers here were unable to compete in the export market because of the low prices of Chinese menthol in Europe and Canada. Direct imports from China are prohibited in the United States. Another bearish influence in the market were early crop reports out of Brazil indicating that 1955 production of menthol is expected to be larger than last year's output. Some estimates place new production at between 125 and 150 tons.

Reserpine—Demand for reserpine alkaloid continued at a steady rate. The difficulty of getting sufficient rauwolfia serpentina root for the manufacture of various drugs used in the treatment of mental disorders has encouraged many pharmaceutical producers to use reserpine.

This alkaloidal principal is derivable from three other authorized species of rauwolfia in addition to the serpentina species and is, moreover, in fairly plentiful supply to meet consumer requirements.

The various plant species from which reserpine is extracted have a diversified range of growth and are found in both hemispheres whereas rauwolfia serpentina root can be found in only a relatively narrow area of growth in India and exports are strictly regulated by the Indian government which is anxious that the region not be denuded of rauwolfia serpentina.

Vitamins — Demand for vitamins continued at generally good levels last week. Supplies were ample for current consumer requirements and expected to continue adequate in the immediate future. New and more varied uses for vitamins are being steadily uncovered, it was pointed up.

Vitamin B_6 has over the past few years been increasingly demonstrated as playing an important function in nutrition. Deficiencies of this vitamin, together with deficiencies of pantothenic acid, are being recognized more and more as factors to be dealt with by the nutritionists and clinicians.

Probably the most outstanding development in the use of vitamins has been in the continued evaluation and progressive use of vitamin B_{12} in therapy. Its specificity in treatment of pernicious anemia

For Late Market Developments, See Page 4

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
67.17	67.17	67.17	72.01

(*For Current Prices see page 9*)

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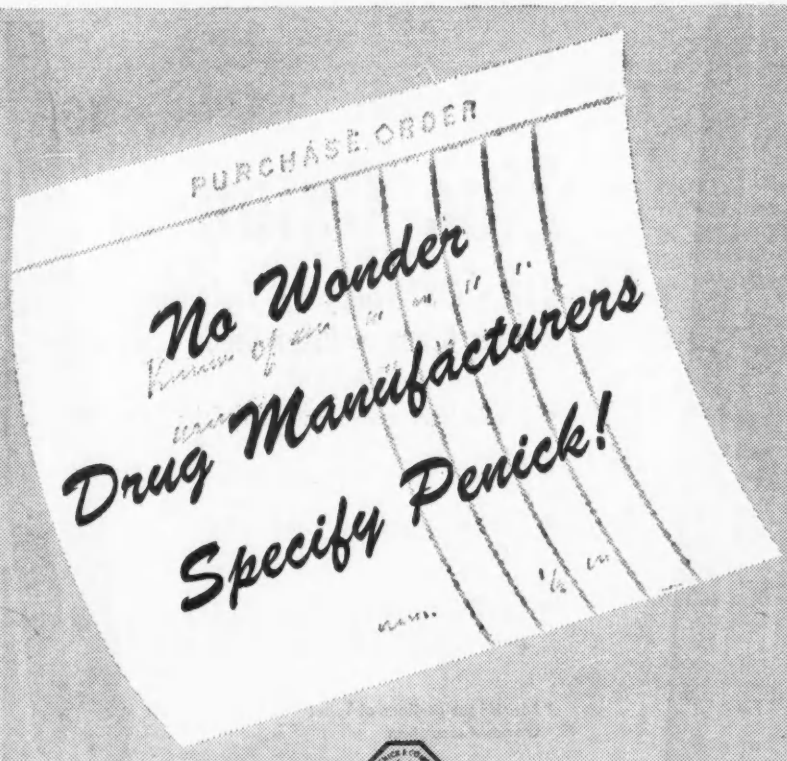

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was definitely established in 1953. In 1954 the use of Vitamin B_{12} therapeutically was extended to include its use orally with the intrinsic factor, and further avaluated in the early treatment of pernicious anemia and with folic acid in the anemias of sprue and pregnancy.

Perhaps equally outstanding, but more provocative, has been the role that vitamins are playing and will play in overcoming some of the untoward and unsuspected side reactions resulting from the excessive use of antibiotics. In this respect, the antibiotics probably act as antimetabolites, inhibiting the activity of systems in which the various vitamins act as enzymes. To overcome these untoward side effects, more of the vitamins such as of pantothenic acid, pyridoxine, thiamine, riboflavin and several of the other B Complex vitamins are required for good nutrition, it was said.

Botanicals

The relatively mild weather in this part of the country has resulted in some slow down in the demand for drug compounds particularly cough and cold remedies in which botanical drugs are important ingredients. The supply outlook in the majority of botanical drugs for 1955 was said to be good. Existing shortages of a few botanical items were expected to grow worse since the collection of the 1955 crop will not be started until well into next year. Lobelia herb continued in tight supply with very little material to be had. Market prices for this botanical were strictly nominal.

Rhubarb root has advanced sharply in recent months. Stocks of Chinese rhubarb have dwindled to the point of non-existence it was said. There were some stocks of India rhubarb root which were quite highly priced in comparison to the value of this item in normal times. Spanish saffron wax has advanced considerably due to higher shipping quotations from origin. There was reported to be considerable reneging on contracts by shippers in Spain. Gum tragacanth was firmer with cables from origin reportedly considerably higher than current spot prices.

The situation in papain continues good, as far as concerns the average consumer. Although considerable quantities of papain currently offered in the market were said to be far below high test standards, smaller consumers are apparently content. Assays of individual lots of papain were said to be quite involved and expensive with the result that most of the papain sold is below strength due to lack of proper testing.

It was further understood that production of high test papain has declined as a result of the general indifference exhibited by papain producers at origin. The low market prices of this material were said to be discouraging to producers and ultimately, the market was expected to advance when current stocks are depleted and replacements are less plentiful.

Ergot—The spot market remained quiet and easy. There was reported to be a substantial amount of low testing material in this market and as, a result, prices were subject to shading. There were reported to be elements in the market offering ergot for sale who are not customarily factors in this market. With considerable barter trades being made in addition to the inability in some cases to bring out of Europe assets in the form of currency, some companies have been bringing in such items as ergot and offering it on market, it was said, resulting in confusion to the consumer.

Mandrake Root—The supply situation in this item has shown no improvement since last reports and none is expected until later this year when collections begin. The scarcity of mandrake root this past season led to two substantial price hikes in podophyllum resin it was noted. Demand for mandrake was reported to be routine since most of the large users were said to have bought up rather heavily last year when prices were lower.

Orris Root—The spot market remained unchanged last week. Supplies were ample to meet consumer requirements and demand was steady but unspectacular. For a time last year shippers at source kept asking prices high but dealers here refused to meet the higher shipments costs with the result that the market ultimately eased on replacement buying.

Papain—There was little if any change in the market since last reports. The spot

Chicago Drug Group Head

Vincent Farrar has been elected 1955 president of the Chicago Drug and Chemical Association. Vice-president of the group is D. H. Coale of J. T. Baker Chemical Company, while its treasurer is F. M. Luckett of Monsanto Chemical Company. W. G. Lister of the Cenpro Corporation has been elected secretary.

market has been indifferent to higher shipping prices quoted from origin. Actually there was a considerable amount of papain for sale, on spot. The quality of various lots was said to run the full gamut from the lowest to the highest. The government restrictions set up in Ceylon earlier this year relating to the quality of papain exports have apparently gone by the board and papain of all varying qualities continues to come into this market. African papain was also reported to have considerable variance, qualitywise. Prices ranged from $4 to $4.50 on the African quality with Ceylon material at $3 to $3.50.

Rhubarb Root—The governmental embargo on trading with Red China which has been in effect for over two years has resulted in spot supplies of this botanical being virtually exhausted. There were scattered lots of very small quantities said to be held very strongly with prices asked almost prohibitive. Indian rhubarb root as a result of the dearth of Chinese material has advanced enormously in price, it was noted. This botanical is virtually non-obtainable also, although prices were heard in the neighborhood of $1.75 per pound for the whole root and $2.50 for the powdered root. These quotations were nominal, of course.

Saffron—Spanish saffron has advanced substantially in the spot market, reflecting stronger asking prices at origin. The current market was around $35 per pound. According to trade reports, there has been considerable reneging on contracts and supplies on spot were tight.

Drug Industry Regulations Are Rescinded by FTC

Trade practice conference rules for the wholesale drug industry which have been in effect since December, 1934, were rescinded last week by the Federal Trade Commission. The agency explained that the rules were general in form and not specifically applicable to the industry and that they did not in all respects reflect present requirements of law. It was added that the industry did not appear to be interested in participating in proceedings for revision of the rules.

Glyco to Move Offices

The executive and sales office of Glyco Products Company will be moved on March 1 to the Empire State building, Fifth avenue and 34th street, New York. The new telephone number will be OXford 5-5140. The present address is 26 Cort street, Brooklyn, N. Y.

Glass Container Shipments: Nov.

Total shipments of narrow-neck glass containers in gross during November were 5,563,000, compared with 6,028,000 in October, according to the Bureau of the Census. In this category, the amount used for medicinal and health supplies was 1,134,000 in November, compared with 1,157,000 in October, and toiletries, 617,000 in November, compared with 613,000 in October.

Total shipments of wide-mouth glass containers in gross during November were 3,601,000, compared with 4,051,000 in October. In this category, the amount used for medicinal and health supplies was 367,000 in November, compared with 417,000 in October; and toiletries and cosmetics, 183,000 in November, as compared with 173,000 in October.

Commodity Investigating Unit Names Deputy Administrator

Appointment of Douglas B. Bagnell as deputy administrator of the Commodity Exchange Authority has been announced by the Department of Agriculture.

Mr. Bagnell was formerly assistant administrator in charge of compliance. He has had twenty years' experience in the investigation of futures trading operations, surveillance of trading practices, and the preparation and presentation of evidence in administrative and criminal proceedings under the commodity exchange act, a department spokesman said.

Pitman-Moore Names Ruch To Sales Manager's Position

Pitman-Moore Company, Indianapolis, Ind., a division of Allied Laboratories, Inc., has appointed Stewart E. Ruch to the position of general sales manager. He has been with the company for the past twenty years. He earlier served as director of sales training, assistant sales manager and, most recently, eastern zone sales manager.

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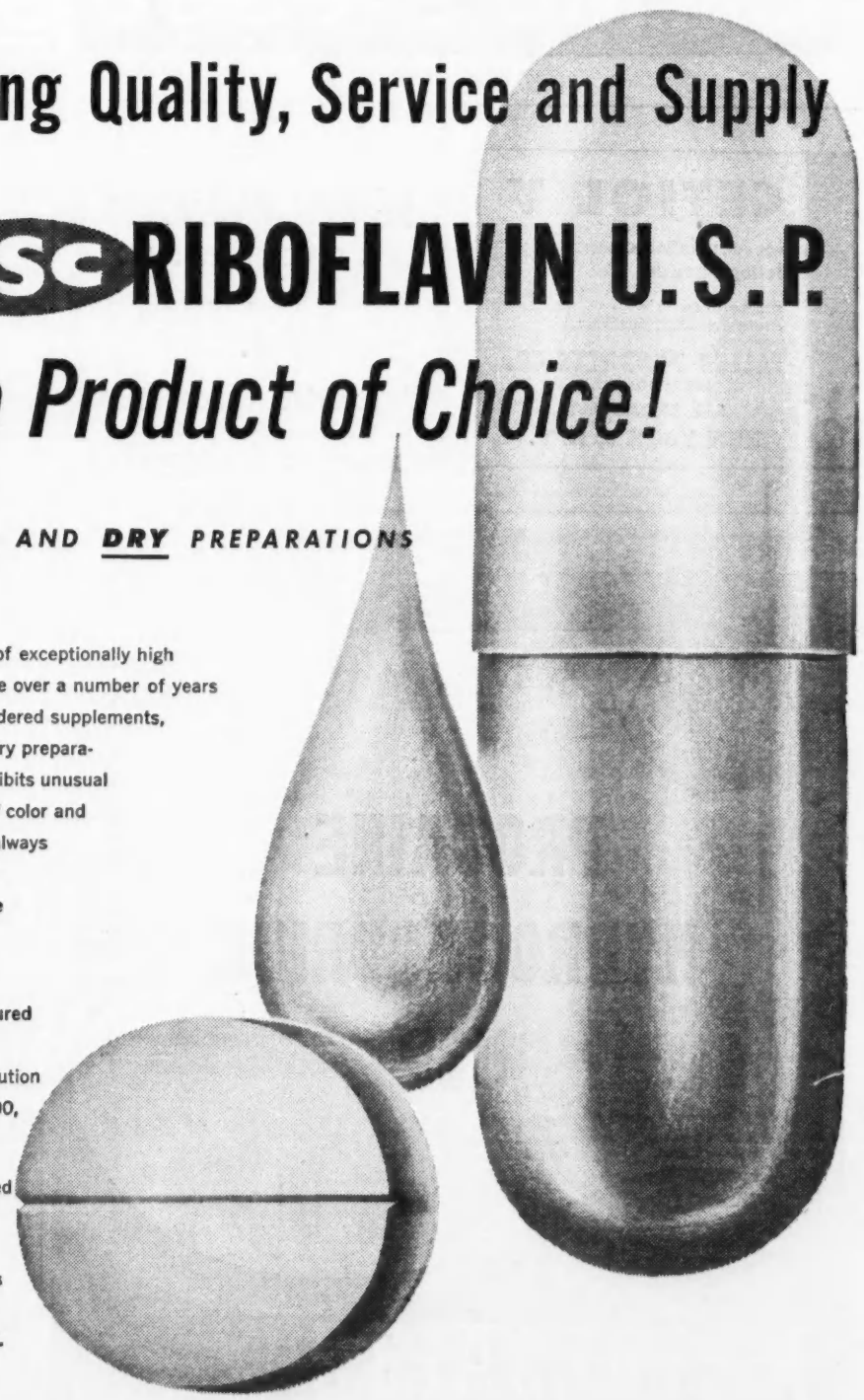

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SCI Given Formula for Research Budgets

—Continued from page 4

try or company. Actually such figures have little or no significance. Any company has specific needs and opportunities for research. These needs and opportunities should be developed to the extent —but only to the extent—that worthwhile and timely objectives can be defined.

"As an example at one extreme, the field of chemicals for biological use is characterized by high incidence of product obsolescence. A company in that field must move fast to maintain competitive position and even faster to improve its position. In such circumstances a research expenditure well over five percent of sales might be neeessary. At the other extreme might be a company engaged in the manufacture of staple products, few in number, mass produced to rigid specifications, and consumed wholly by other manufacturers. In this instance, both the need and opportunity for research might be so moderate as to require an expenditure of only 1 or 2 percent of sales," Mr. Williams' paper said.

Prior Projects a Factor

"Naturally, all research budgets," it was emphasized, "must provide for continuation of going projects begun under earlier budgets. Appraisal of research projects, particularly as they proceed through the expensive development stage, is one of management's most difficult activities. In view of the emphasis placed on the 'scientific method' in attacking research and engineering problems, it has always been astonishing to me how casually, if at all, the same technic is applied to the economic aspects. Few types of effort can yield so much light per unit of energy input. At the same time, few types of effort when ineptly performed can produce such misleading conclusions. Deficient performance usually can be traced to lack of insistence by management that standards of economic estimation be on a par with standards of laboratory experimentation. Other factors contributing to poor results are relegation of the economic study function to an obviously minor position in the organization, and failure to draw upon skills of other divisions—notably manufacture, sales, purchasing, and engineering.

"Probably the most significant generalization that can be drawn from analyses of the time required to bring research projects to profitable operation," the paper noted, "is the importance of maintaining a succession of projects, so that there can be some semblance of stability in research expenditure and capital investment. Even so, regularized product emergence cannot be expected, much less assured. There will be periods of drought and periods of plenty.

Individual Can Change Industry

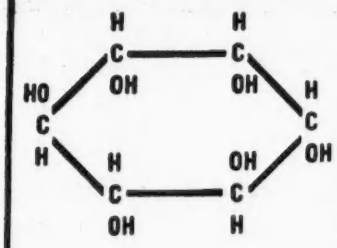
"We all know that a single concept by an individual can change the whole course of an industry. We know also that skillful leaders and developers are needed as well as those possessing creative talent. A question for management is how to provide a working climate conducive to achievement and personal satisfaction.

"In order to attain such a climate, initiative must be encouraged while at the same time maintaining smooth working relationships within groups and among groups," it was pointed out. "Yet to a degree, initiation and collaboration are antagonistic. The difficulty is that discovery and invention are highly individual matters, whereas the great mass of technical effort is concerned with the elaboration of ideas, and this must be done largely through groups. Great emphasis, therefore, is placed on organization, which even in companies of moderate size, tends to be highly specialized and complex. Thus, an idea proposed by a research worker ordinarily is reviewed by various levels of supervision. If the idea survives this preliminary screening, it may be considered by a research steering committee. This is a time-consuming procedure. By then, enthusiasm has waned. The iron has cooled. The idea has fallen victim to the sheer weight of organization. The remedy, obviously, lies in greater delegation of authority to experienced supervisors who will appraise ideas not with the thought of bringing up every conceivable objection, but of offering encouragement or sympathetic discouragement, as the case may be, promptly and on an intimate personal basis. The rule to follow is that the burden of proof against a reasonable tryout of an idea should be on supervision, so that the initiator is never subjected to a form of technical court martial.

"Looking toward the future, if I have concern for industrial research, it is not for want of worthwhile goals. In one field alone, that of supplementing and supplanting our ever-lessening resources of many natural materials, the potential is enormous. The achievements of chemical synthesis in the fields of dyes, elestomers, fibers, medicinals, nitrogen, and plastics all have been within the span of life of many of us here tonight. Achievements of similar or even greater significance are bound to ensue within the half century just begun," Mr. Williams' paper said.

"Although we may be at the beginning of the age of atomic energy, we know we must ultimately draw energy directly from the sun. In the meantime, for the greater part of the rest of the century, fossil fuels will continue to be our principal energy source. Energy is the basic requirement of an industrialized civilization, for without energy we cannot maintain our output, much less progress toward higher standards of living. Food supplements for an ever-expanding population comprise another field of exceptional need and promise. This too is basic, as the ratio of arable land to population is continually decreasing. Still another great opportunity for chemical achievement lies in the field of structural materials. We are only on the threshold of further developments in polymers with properties which will permit broad use in structural applications," the paper pointed out.

INOSITOL



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Firmenich Technical Director

Hubert M. Cole has been named technical director of the flavor division of Firmenich, Inc., New York, effective February 1. Mr. Cole assumes the duties of W. D. Graham, who has been assigned to the research laboratories of Firmenich & Cie., Geneva, Switzerland. For the past fifteen years, Mr. Cole has been associated in a technical flavor capacity with General Foods Corporation, White Plains, N. Y.

Continental Can Acquires Wallace Container Corp.

Wallace Container Corporation, Santa Ana, Cal., has been purchased by Continental Can Company, New York. It will now be known as the Vynite Collapsible Tube Division and be part of Continental's Bond Crown and Cork Division. Wallace H. Shapero, former president of Wallace, will be general manager of the new division, reporting directly to John G. Murray, vice-president of the crown and cork division.

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AEC Awards 15 Unclassified Physical Research Contracts

Award of fifteen unclassified physical research contracts with universities and private research institutions has been announced by the Atomic Energy Commission. Three are new contracts, and the remainder are renewals of contracts which have been in force. The contracts, which generally were for a term of one year, were let as part of the AEC's continuing policy of utilizing private research laboratories in conducting research related to atomic energy.

Contract proposals are usually reviewed by scientists who are well acquainted with the field of the proposed research and its relevance to the atomic energy program. Their reviews are taken into consideration by the AEC division of research before a decision is made whether or not to accept the proposal. The contracts are negotiated and administered by AEC operations offices.

Generally, the institutions participate with the AEC in defraying the costs of the research. The institution contributes the funds and services which it normally devotes to work in that field, and the AEC provides additional assistance to permit the work to proceed more rapidly or with an expanded scope.

Merck Signs 1-Year Labor Pact with Rahway Workers

A new one-year labor agreement providing for wage increases from 1 to 7 cents an hour for 1,500 production and maintenance employees at the Rahway, N. J., plant of the chemical division of Merck & Co. was reached on January 18 by the plant management and Local 575, United Gas, Coke and Chemical Workers of the CIO. The contract also provides for improved shift premium pay and a paid holiday on Washington's Birthday, in addition to the seven holidays previously in effect. Other contractual changes were also included in the settlement.

A similar contract agreement was reached on January 18 by the plant management and Local 580 representing 500 production and maintenance employees at the chemical division Cherokee plant, Danville, Pa.

Parenteral Drug Ass'n Will Meet January 28

The Parenteral Drug Association will hold its monthly dinner at 6:30 p.m., January 28, at the New Yorker hotel.

Vernon Trygstad, director of pharmacy services in the department of medicine and surgery of the Veterans Administration, will speak on "Selection of Parenteral Drugs For Use by the Veterans Administration." Robert Blossom, of Lederle Laboratories Division of American Cyanamid Company, will speak on "Methods Engineering in Parenteral Filling and Packaging." A round-table discussion will follow.

Metal Cans Shipments: November

Total shipments of metal cans in November were 24 percent below shipments during October, according to the Bureau of Census. These figures are based on metal cans shipments expressed in terms of weight of steel consumed in the manufacture of the cans shipped. In November, metal cans shipments amounted to 273,621 short tons, compared with the October figure of 361,679 short tons and a figure of 314,679 short tons in November, 1953.

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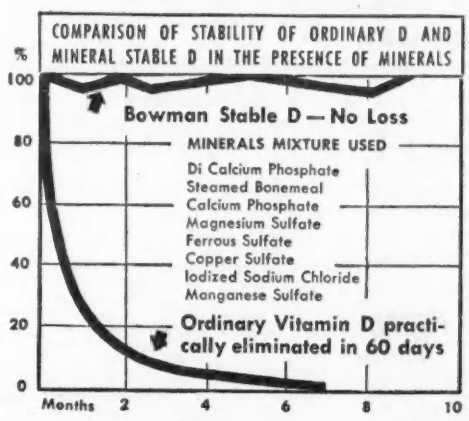

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6 cans, Hensel Bruckmann & Lorbacher, Rotterdam
7 dms, C A Haynes, Rotterdam
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87 dms, Sandoz Chemical Works, Havre
ANNATTO SEED—64 bgs, Hanover Bank, Callao
ANTIMONY REGULUS—10 cs, C Gitlan, Antwerp
ARABIC GUM—250 bgs, Guaranty Trust Co, Port Sudan
250 bgs, National City Bank, Port Sudan
ARGOLS—450 bgs, Tartaric Raw Materials, Lisbon
ARROW ROOT—6,000 bgs, Morningstar Nicol, St Vincent
ASCORBIC ACID—4 dms, Foster T Smith, Yokohama
BARBASCO ROOT—58 bls, Astoria Panamericana, Callao
BARIUM CHLORATE—40 dms, Tar Residuals Inc, Rotterdam
BAY OIL—1 dm, Citrus & Allied Essential Oil Co, Dominica
2 dms, Barclays Bank, Dominica
BEESWAX—38 bgs, Bank of Manhattan Co, Havana
55 bgs, Reaud Geck Corp, Puerto Barrios
12 bgs, Lenape Trading Co, Santiago
71 bgs, Santiago
41 bgs, Reual Geck Corp, Ciudad Trujillo
30 bgs, Schutte & Focke, Ciudad Trujillo
10 bgs, Guaranty Trust Co, Alexandria
8 bgs, Strahl & Pitsch, La Libertad
75 bgs, H H Pike, Santiago
47 bgs, Port Au Prince
165 bgs, H H Pike Tampico
25 bgs, H H Pike, Ciudad, Trujillo
46 bls, Chase National Bank, Lisbon
116 blks, Colonial Trust Co, Lisbon
20 bgs, Havana
BISMUTH—63 boxes, Cerro de Pasco Corp, Callao
BOLDO LEAVES—163 bls, Wessel Duval & Co, Valparaiso
BUTTONLAC—50 bgs, Schwab Bros, Calcutta
100 bgs, C H Timm, Calcutta
CAMPHOR OIL—10 dms, United Global Corp, Keelung
10 dms, George Uhe Co, Keelung
10 dms, J Berlage, Keelung
5 dms, S B Penick & Co, Yokohama
POWDER—50 cs, National City Bank, Keelung
CAPRALACTAM—250 dms, Wood Niebuhr & Co, Rotterdam
CARAWAY SEED—100 bgs, Rotterdam
CARDAMOM—20 cs, Wm E Martin, Bombay
22 cs, Karl H Landes & E Balint, Colombo
5 cs, S B Penick & Co, Bombay
PODS—10 bgs Knickerbocker Mills, Peurto Barrios
CARNAUBA WAX—1,501 bgs, Gillespie & Co, Cabedelo
111 bgs, Frank B Ross, Cabedelo
250 bgs, Wm H Muller, Amsterdam
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2,000 bgs, J Spellacy, Melbourne
500 bgs, P A Dunkel, Bordeaux
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CASHEW NUT SHELL LIQUID—89 tons, Irvington Varnish & Insulator Co, Cochin
CASSIA—81 bls, Rotterdam
CASTOR BEANS—8,467 bgs, National City Bank, Maceio
1,300 bgs, Grace National Bank, Bahia
CELERY SEED—425 bgs, M J Golombeck, Bombay
110 bgs, R T French, Marseille
88 bgs, C Czarinkow, Bombay
88 bgs, A G Dunn, Bombay
174 bgs, Otto Gerdau, Bombay
CETYL ALCOHOL—40 dms, Orbis Products Corp, Liverpool
CHESTNUT EXTRACT—2,400 bgs, Barkey Importing Co, Genoa
CHLORAL HYDRATE—40 dms, Fallek Products Co, Rotterdam
n-CHLOROACETIC ACID—178 dms, International Selling Corp, Marseille
CINNAMON QUILLS—50 bls, V A Cordovi, Colombo
50 bls, Middleton & Co, Colombo
CITRONELLA OIL—5 dms, Bluefries N Y, Inc, Colombo
CLOVE OIL—24 dms, Djibouti
COCOA RESIDUE—100 bgs, Rotterdam
COCONUT OIL—425 tons, American Trust Co, Zamboanga
COD OIL—200 dms, Reilly Whiteman Walton Co, St Johns
100 dms, Ottol Oil Co, St Johns
LIVER OIL—150 dms, Scandinavian Oil Co, Bergen
25 dms, Arista Oil Products Co, Alesund
307 cs, National City Bank, Lisbon
COPAL GUM—177 bgs, O G Innes Corp, Matadi
85 bgs, S Winterbourne & Co, Matadi
35 bgs, O G Innes Corp, Singapore
COPPER CYANIDE—60 dms, Guaranty Trust Co, Antwerp
m-CRESOL—2 kgs, H A Gogarty, Liverpool
CRESYLIC ACID—252 dms, H A Gogarty, Liverpool
100 dms, James E Fox, Liverpool
CUBE POWDER—246 bgs, Callao
CUMIN SEED—484 bgs, Curacao Trading Co, Khorramshahr
230 bgs, General Foreign Sales Corp, Khorramshahr
192 bgs, Kellys America Ltd, Khorramshahr
710 bgs, Hismoco American Co, Khorramshahr
CUTTLEFISH BONE—50 bxs, Kellogg Seed Co, Portimao
41 cs, Lisbon
250 cs, Sfax
DAMMAR GUM—50 cs, S Winterbourne & Co, Singapore
192 bgs, S Winterbourne & Co, Singapore
140 bgs, Internatio Rotterdam, Singapore
70 bgs, O G Innes Corp, Singapore
DEXTRIN—800 bgs, Rotterdam
DOGWOOD BARK—110 bls, Lydia Pinkham Medicine Co, Kingston
EARTH COLOR—450 bgs, T H Deutz Co, Rotterdam
EPSOM SALT—400 bgs, Rotterdam
EUCALYPTUS LEAVES—66 bls, Lisbon
FUEL OIL—66,315 bbls, Esso Standard Oil Co, Las Piedras
56,061 bbls, Hess Inc, Punta Cardon
10,000 bbls, Asiatic Petroleum Corp, Curacao
102,079 bbls, Paragon Oil Co, Curacao
67,958 bbls, Paragon Oil Co, Puerto La Cruz
215,857 bbls, Paragon Oil Co, Tampico
98,862 bbls, Hess Inc, Curacao
230,418 bbls, Esso Standard Oil Co, Aruba
344,043 bbls, Esso Export Corp, Aruba
193,235 bbls, Paragon Oil Co, Punta Cardon
108,419 bbls, Esso Standard Oil Co, Caripito
GARLIC OIL—2 cs, Magnus Mabee & Reynard, Kobe
GELATIN—609 bgs, Transatlantic Animal By-Products Corp, Hamburg
GINGER—298 bgs, Bankers Trust Co, Freetown
196 bgs, Irving Trust Co, Freetown
97 bgs, Chemical Bank, Freetown
198 bgs, Corn Exchange Bank, Freetown
GLUESTOCK—340 bgs, Karr Ellis, Liverpool
24 bls, Karr Ellis, Liverpool
GLYCERINE—82 dms, R P Casado, Havana
GRAPHITE — 600 bgs, Asbury Graphite Mills, Trondheim
550 bgs, Hanover Bank, Mombasa
250 bgs, C Pettinosi Mombasa
GUANINE—10 dms, Mearl Corp, Rotterdam
GYPSUM—9,958 tons, U S Gypsum Co, Hantsport
HENNA LEAVES—109 bgs, S B Penick & Co, Port Said
34 bls, Meer Corp, Bombay
IPECAC ROOT—10 bgs, Meer Corp, Cristobal
IRON BLUE—82 dms, Van Oppen & Co, Liverpool
JALAP ROOT—6 bgs, Vera Cruz
JAPAN WAX—50 cs, Frank B Ross, Yokohama
KARAYA GUM—245 bgs, Morningstar Nicol, Bombay
61 bgs, P A Dunkel, Bombay
273 bgs, Colony Import & Export Corp, Bombay
61 bgs, Meer Corp, Bombay
5 bgs, S B Penick & Co, Bombay
KOLA NUTS—256 bgs, D Steengrafe & Co, Kingston
LACTOSE—200 dms, Chas L Huisking & Co, Liverpool
600 dms, Nestle Co, Liverpool
LAVENDER FLOWERS—20 bgs, Meer Corp, Marseille
LEMONGRASS OIL — 11 dms, Ungerer & Co, Cochin
11 dms, VanAmeringen-Haebler, Cochin
6 dms, Albert Verley & Co, Cochin
LICORICE FLAKES—2,000 bxs, Wm E Martin, Izmir
250 bxs, Izmir
LIME OIL—10 dms, Lo Curto & Funk, Vera Cruz
15 dms, Walter F Mahneke, Vera Cruz
LOBELIA INFLATA—136 bgs, Antwerp
LOCUST BEAN—308 bgs, Hanover Bank, Casablanca
GUM—550 bgs, Morningstar Nicol, Genoa
410 bgs, Morningstar Nicol, Lisbon
400 bgs, Bank of N Y, Lisbon
140 bgs, Morningstar Nicol, Portimao
500 bgs, Morningstar Nicol, Piraeus
LOGWOOD EXTRACT—30 cks, American Dyewood Co, Kingston
MAGNESITE—315 bgs, H A Gogarty, Colombo
MAGNESIUM CARBONATE—200 bgs, Reheis & Co, Liverpool
CHLORIDE—600 bgs, Industrial Mining & Trading Co, Marseille
MANGROVE BARK—482 bgs, Barkey Importing Co, Lourenco Marques
MARJORAM LEAVES—100 bls, Louis Furth, Marseille
45 bgs, Hismoco American Co, Marseille
MERCURIC SULFIDE—2 dms, L H Keller & Co, Tampico
MERCURY—70 flks, L H Keller & Co, Tampico
50 flks, Tampico
MICRANTHUM HAYATA OIL—3 dms, Fritzsche Bros, Keelung
MINERAL WAX—7 bgs, Dura Commodities Corp, Hamburg
10 bgs, Dura Commodities Corp, Bremen
MOLASSES—500 tons, W R Grace & Co, Salaverry
MONTAN WAX—66 bgs, Rotterdam
MUSTARD SEED—440 bgs, Becker Mayer Seed Co, Hamburg
MYROBALANS EXTRACT—500 bgs, Barkey Importing Co, Calcutta
NAPHTHALENE—933 bgs, Koppers Co, Rotterdam
1,046 bgs, Chas Page & Co, Gdynia
627 bgs, Rotterdam
NAPHTHOL—1 dm, Orlex Chemical Corp, Rotterdam
2 dms, C A Haynes, Hamburg
NIGER SEED—471 bgs, Corn Exchange Bank, Massawa
NUTMEG—33 bgs, Rotterdam
OCOTEA CYMBARUM OIL—75 dms, Norda Essential Oil & Chemical Co, Rio de Janeiro
OLIBANUM GUM—67 bgs, Manufacturers Trust Co, Massawa
OLIVE OIL—125 dms, Credit Suisse, Algiers
10 dms, Algiers
225 dms, Manufacturers Trust Co, Sfax
25 dms, Chase National Bank, Sfax
25 dms, Credit Suisse, Sfax
200 dms, National City Bank, Sfax
50 dms, Atlantic Bank of N Y, Sfax
125 dms, First National Boston, Sfax
106 dms, Bank of America, Malaga
84 dms, Mercantile Trust Co, Malaga
100 dms, Chase National Bank, Malaga
125 dms, National City Bank, Seville
250 dms, Seville
550 dms, Cadiz
ORRIS ROOT—100 bgs, Lo Curto & Funk, Leghorn
PALM OIL—504 tons, Balfour Guthrie, Matadi
253 tons, Stein Hall & Co, Belawan-Deli
100 dms, Matadi
KERNEL OIL—289 tons, Ango Ango
200 tons, Balfour Guthrie, Matadi
PANICUM SEED—112 bgs, Levy & Levis Co, Brisbane
PAPAIN—17 cs, Chas L Huisking & Co, Tanga
55 cs, Mombasa
38 cs, Chas L Huisking & Co, Mombasa
PAPRIKA—130 bgs, Joseph Weinstein, Alicante
475 bgs, A A Sayia, Alicante
1,625 bgs, Alicante
650 bgs, R F Downing, Alicante
125 bgs, Gallagher & Ascher, Alicante
PATCHOULI LEAVES—81 bgs, L A Champon & Co, Mombasa
PEPPER, BLACK—320 bgs, Mincing Trading Corp, Cochin
48 bgs, Max Van Pels, Vera Cruz
40 bgs, A G Dunn, Cochin
80 bgs, J Berlage, Cochin
134 bgs, A C Israel, Singapore
120 bgs, A C Israel, Cochin
160 bgs, Virchand Panachand, Cochin
70 bgs, Borneo Sumatra Trading Co, Kuching
299 bgs, Vera Cruz
70 bgs, Singapore
RED—200 bgs, M S Cowen Co, Kobe
100 bgs, M J Golombeck, Iskenderun
84 bgs, Wm E Martin, Mombasa
199 bgs, Becker Mayer Seed Co, Izmir
52 bgs, M J Golombeck, Mombasa
140 bgs, S L Jones & Co, Kobe
100 bgs, R Badenhop Corp, Kobe
WHITE—33 bgs, Internatio Rotterdam, Pangkal Pinang
270 bgs, M Rothschild & Co, Pankal Pinang
PERCHLOROETHYLENE—16 dms, Chemical Manufacturing Co, Liverpool
PETROLEUM, CRUDE—170,029 bbls, California Oil Co, Sicion
120,000 bbls, Socony Vacuum Oil Co, Puerto La Cruz
119,577 bbls, Metropolitan Petroleum Corp, Curacao
198,322 bbls, Phillips Petroleum Co, Puerto La Cruz
PIMENTO—50 bgs, Knickerbocker Mills, Kingston
LEAF OIL—2 dms, W J Bush & Co, Kingston
10 dms, Fritzsche Bros, Kingston
1 dm, D W Hutchinson & Co, Kingston
POLLACKLIVER OIL—100 dms, Interocean Chemical Corp, Yokohama
75 dms, Bache & Co, Yokohama
POLYVINYL CHLORIDE—4,615 bgs, Naples
POPPY SEED—100 bgs, Rotterdam
426 bgs, Khorramshahr
POTATO STARCH—50 bgs, Manhattan Paste & Glue Co, Rotterdam
PSYLLIUM SEED—134 bgs, S B Penick & Co, Bombay
HUSKS—249 bgs, Meer Corp, Bombay
577 bgs, T M Duche & Sons, Bombay
PYRETHRUM FLOWERS—90 bls, Gulf Oil Corp, Mombasa
QUEBRACHO EXTRACT—1,833 bgs, First National Boson, Buenos Aires
3,033 bgs, Manufacturers Trust Co, Buenos Aires
1,636 bgs, Hanover Bank, Buenos Aires
QUINCE SEED—110 bgs, Meer Corp, Khorramshahr
54 bgs, Meer Corp, Bombay
156 bgs, Khorramshahr
RED IRON OXIDE—275 bgs, Reichard Coulston, Malaga
1,305 bgs, Landers Segal Color Co, Malaga
105 dms, Mfrs Trust Co, Seville
100 dms, Chemical Bank, Seville
RICE STARCH—100 bgs, Stein Hall & Co, Alexandria
225 bgs, Morningstar Nicol, Antwerp
RUTIN—12 dms, S B Penick & Co, Melbourne
SAFFRON—2 cs, Galvanoni & Nevy Bros, Genoa
SAGE OIL—50 cs, Norda Essential Oil & Chemical Co, Antwerp
SANDALWOOD OIL—9 cs, Volkart Bros, Bombay
SASSAFRAS OIL—12 dms, Fritzsche Bros, Keelung
10 dms, Dodge & Olcott, Yokohama
SEEDLAC—548 bgs, Gillespie Rogers Pyatt, Calcutta
400 bgs, Mantrose Corp, Calcutta
400 bgs, Lind Mayer & Co, Calcutta
397 bgs, Wm Zinsser & Co, Calcutta
175 bgs, P N Rowe, Calcutta
300 bgs, Schwab Bros, Calcutta
100 bgs, Borneo Sumatra Trg Co, Calcutta
200 bgs, J H Ross, Bangkok
250 bgs, United Saellac Corp, Bangkok
250 bgs, Bankers Trust Co, Bangkok
1,000 bgs, Borneo Sumatra Trg Co, Bangkok
515 bgs East Asiatic Co, Bangkok
250 bgs, Schwab Bros, Bangkok
250 bgs, Haeuser Shellac Co, Bangkok
500 bgs, Gillespie Rogers Pyatt, Bangkok
1,500 bgs, Mantrose Corp, Bangkok
500 bgs, Bangkok
SERPENTINA ROOT—2,247 bgs, Ciba Pharmaceutical Products, Matadi
47 bgs, Brown Bros, Calcutta
80 bgs, Tuticorin
SESAME SEED—560 bgs, Levy & Levis Co, Puerto Barrios
HULLED—250 bgs, Chase National Bank, Corinto
200 bgs, W R Grace & Co, Cristobal
123 bgs, Beirut
SHELLAC—50 bgs, Colony Import & Export Corp, Calcutta
75 bgs, Schwab Bros, Calcutta
75 bgs, P N Rowe, Calcutta
50 bgs, Wm Zinsser & Co, Calcutta
50 bgs, Schwab Bros, Bangkok
75 bgs, Dings & Schuster, Bremen
60 bgs, F H Paul & Stein Bros, Hamburg
WAX—200 bgs, F H Paul & Stein Bros, Rotterdam
SOAPBARK—503 bls, S B Penick & Co, Valparaiso
SODIUM BICARBONATE—1,000 bgs, Chemical Mfg Co, Liverpool
CYANIDE—696 dms, Chemical Mfg Co, Liverpool
134 dms, American Cyanamid Co, Liverpool
FERROCYANIDE—448 bgs, Antwerp
STYRAX GUM—25 cs, George Lueders & Co, Izmir
SUGAR CANE WAX—80 bgs, H L Blackford, Barbados
SUMAC EXTRACT—300 bgs, Intern Expediters, Genoa
TALC—892 bgs, Whittaker Clark & Daniels, Bombay
TANKAGE—612 bgs, International Packers Ltd, Buenos Aires
TAPIOCA FLOUR—5,000 bgs, Stein Hall & Co, Bangkok
TARTAR—355 bgs, Tartaric Raw Materials, Bordeaux
THYME LEAVES—8 bgs, Hismoco American Co, Marseille
TRAGACANTH GUM—46 bgs, Brown Bros, Khorramshahr
3 cs, Eastern Mohair & Trading Co, Khorramshahr
77 bgs, Thurston & Braidich, Khorramshahr
50 cs, International Corp, Khorramshahr
25 cs, V Simidian & Co, Khorramshahr
50 cs, S S Bahari, Khorramshahr
TRICHLOROETHYLENE—177 dms, Chemical Mfg Co, Liverpool
TURMERIC—202 bgs, Callao
UREA—400 bgs, Nylos Trading Co, Genoa
SYNTHETIC—2,000 bgs, Chemical Mfg Co, Liverpool
VALONIA EXTRACT—369 bgs, Bensignor Import Co, Beirut
VANILLA BEANS—15 cs, L A Champon & Co, Mombasa
259 cs, Marseille
21 cs, Djibouti
VEGETABLE WAX—25 cs, Wm Diehl & Co, Kobe
25 cs, Strohmeyer & Arpe, Kobe
VETIVER OIL—1 dm, L A Champon & Co, Port Au Prince
WATTLE BARK—1,050 bgs, Bank of N Y, Tanga
EXTRACT—720 bgs, River Plate Corp, Mombasa
1,350 bgs, Barkey Importing Co, Mombasa
WHITING—600 bgs, Pluess Staufer, Antwerp
WOOL GREASE—12 dms, N I Malstrom, Liverpool
24 dms, Bank of N Y, Fremantle
77 dms, National City Bank, Adelaide
13 dms, Hummel Chemical Co, Melbourne
ZEDOARY ROOT—100 bgs, Meer Corp, Colombo
ZINC-AMMONIUM CHLORIDE—9 dms, Lo Curto & Funk, Liverpool
ZIRCON SAND—3,220 bgs, Lo Curto & Funk, Brisbane
1,200 bgs, International Titaniu Corp, Brisbane

Baltimore

ARSENIC, CRUDE—24 bbls, American Smelting & Refining Co, Tampico
CHESTNUT EXTRACT—988 bgs, Chase National Bank, Naples

Boston

BONE—295 bgs, Armour & Co, Montevideo
BONEMEAL—1,098 bgs, Ossa Products Corp, Buenos Aires
316 bgs, Eastman Gelatine Corp, Buenos Aires
LOCUST BEAN FLOUR—30 bgs, Catania
QUEBRACHO EXTRACT—542 bgs, Manufacturers Trust Co, Buenos Aires
1,018 bgs, Buenos Aires
TAPIOCA FLOUR—500 bgs, Internatio Rotterdam, Bangkok
600 bgs, Stein Hall & Co, Bangkok

Los Angeles

AGAR—12 cs, Moorhead & Co, Yokohama
ARABIC GUM—159 bgs, Farmers & Merchants National Bank, Port Sudan
190 bgs, Bank of N Y, Port Sudan
BONEMEAL—2,205 bgs, Alexandria
2,205 bgs, Genoa
CASTOR OIL—245 dms, Walter J Williams Co, Bombay
DILLSEED—80 bgs, D Hecht & Co, Bombay
COPRA—800 long tons, Procter & Gamble Co, Cebu
500 long tons, Procter & Gamble Co, Dumaguete
500 long tons, American Trust Co, Legaspi
CAKE—2,240 bgs, Pacific Vegetable Oil Corp, Manila
6,720 bgs, American Trust Co, Zamboanga
4,000 bgs, Pacific Vegetable Oil Corp, Manila
CREOSOTE OIL—983 long tons, Bernuth Lembeke Co, Shimotsu
KARAYA GUM—156 bgs, Hathaway Allied Products Co, Bombay
MOLASSES—12,083 long tons, Iloilo
PEPPER, RED—195 bgs, Consolidated Food Corp, Kobe
SEEDLAC—200 bgs, Henry W Peabody & Co, Bangkok
250 bgs, Getz Brothers, Bangkok
700 bgs, East Asiatic Co, Bangkok
TAPIOCA FLOUR—1,200 bgs, Stein Hall & Co, Bangkok

Norfolk

CHESTNUT EXTRACT—511 bgs, Barkey Importing Co, Genoa
COTTON LINTERS—136 bls, Norton & Ellis Co, Santos
LOCUST BEAN GUM—112 bgs, Genoa

Philadelphia

CASTOR OIL—415 tons, Rohm & Haas, Bombay
CRESYLIC ACID—100 dms, Manchester
FISHLIVER OIL—100 dms, Arista Oil Products Co, Yokohama
50 dms, Chase National Bank, Yokohama
50 dms, Yokohama
GLYCERINE—390 dms, Fehr Bros, Bombay
GYPSUM—5,327 tons, U S Gypsum Co, Hantsport
MOLASSES—1,086,625 gals, Banes
751,449 gals, Publicker Co, Manola
1,178,352 gals, Publicker Co, Tanamo
524,877 gals, S Western Sugar & Molasses Co, Port Tarafa
1,017,006 gals, Antilla
312,271 gals, Matanzas
NAPHTHALENE—3,717 bgs, Rotterdam
PEANUT OIL—299 tons, Liverpool
PEATMOSS—400 bls, E Dunwoody, Bremen
400 bls, New Amsterdam Import Co, Bremen
PETROLEUM, CRUDE—209,356 bbls, Atlantic Refining Co, Amuay Bay
203,892 bbls, Atlantic Refining Co, Mena Al Ahmadi
147,596 bbls, Texas Co, Covenas
132,733 bbls, Texas Co, Las Piedras
144,897 bbls, Gulf Oil Corp, Las Prderas
109,422 bbls, Gulf Oil Corp, Puerto La Cruz
165,000 bbls, British American Oil Co, Puerto La Cruz
183,928 bbls, Socony Vacuum Oil Co, Mena Al Ahmadi
286,378 bbls, Socony Vacuum Oil Co, Puerto La Cruz
PRUSSIAN BLUE—50 dms, Vandergrift Co, Rotterdam
QUEBRACHO EXTRACT—541 bgs, Hanover Bank, Buenos Aires
TAPIOCA FLOUR—1,600 bgs, Brown Bros, Bombay
VANILLA BEANS—44 cs, Zink & Trieste, Mombasa
WHITING—3,300 bgs, Pluess Staufer, Antwerp
ZIRCON SAND—15,206 bgs, Fremantle

San Francisco

CELERY SEED—83 bgs, H M Newhall & Co, Bombay
CHLORINATED RUBBER—20 bgs, C M C Chemicals, Liverpool
CINNAMON QUILLS—25 bls, Volkart Bros, Colombo
50 bls, Colombo
COPAL GUM—15 bkts, D Hecht & Co, Hong Kong
COPRA OIL MEAL—1,000 bgs, Manila
CREOSOTE—1,004 tons, Bernuth Lembcke Co, Amsterdam
DILL SEED—80 bgs, D Hecht & Co, Bombay
EARTH COLOR—225 bgs, Frank D Davis, Bremen
MOLASSES—3,100 tons, Southwestern Sugar & Molasses Co, Kaohsiung
NICKEL CHLORIDE—3 cks, N Y Hanseatic Corp, Liverpool
UREA—13,086 bgs, Atkins Kroll & Co, Antwerp

Narcotics Bureau Calls Attention to Law Changes

The Bureau of Narcotics of the Treasury Department has called attention of the industry to two important changes in procedures affecting manufacturers and wholesalers of narcotics which may have escaped their notice. The two changes were contained in Treasury Decision No. 48, which was issued last November 24. They are:—

1. Effective February 1, exempted officials will procure narcotic drugs and preparations by the use of regular official narcotic order forms in the same manner as druggists, physicians or other persons registered under the law. Exemption certificates heretofore accompanying the orders from such officials will no longer be required.

2. In case of a national emergency, proclaimed by the President, properly authorized civil defense officials may procure narcotic drugs, when needed for emergency relief, by presenting to the supply house a special order form issued to such officials by the federal civil defense administration. These special civil defense order forms are to be accepted and filled only during a national emergency caused by enemy attack, so proclaimed by the president, and have no validity at any other time.

Bids Wanted

Paint, 120 qts. liquid drier paint, 1,600 gals. interior, gloss enamel, 700 gals. interior, semi-gloss synthetic enamel, 50 gals. clear, spraying lacquer, 300 gals. rubber base, concrete floors paint, 450 gals. ready mix, exterior trim paint, 1,050 gals. oil, interior, flat wall paint, 60 gals. red lead base paint, 132 gals. thinner, for lacquer and dope of spraying type, 750 gals. paint, petroleum spirits thinner, 1,815 gals. paint, volatile mineral spirits thinner, inv. WCL-5583, Jan. 27, Gen. Services Adm., Fed. Supply Service, Rm. 212, Fed. Bldg., Public Sq., Cleveland 14, O.; 5,300 gals. deck paint, Topeka, Kans., inv. 383-459, Feb. 7, 30,000 gals. deck paint, formula No. 23 54, East & West Coasts, inv. 383-488, Feb. 7, 6,512 gals. deck paint, inv. 154-Q, Feb. 17, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila., Pa.

Soda ash, 300 cwt., inv. 7112, Jan. 27, Gen. Services Adm., Business Service Center, Region 8, Bldg. 41, Denver Fed. Center, Denver 2, Colo.

Sodium bicarbonate, 300 lbs., inv. 7112, Jan. 27, Gen. Services Adm., Business Service Center, Region 8, Bldg. 41, Denver Federal Center, Denver 2, Colo.

Sodium metasilicate, 120 cwt., inv. 7112, Jan. 27, Gen. Services Adm., Business Service Center, Region 8, Bldg. 41, Denver Fed. Center, Denver 2, Colo.

Gen'l Aniline Appointments

—Continued from page 5

den, was appointed plant manager there to succeed Dr. Walsh.

In line wth these appointments, General Aniline made a number of other staff changes during the week. Dr. F. Wuerth was appointed to the staff of Dr. Zoss as manager of design engineering. He will continue to supervise the design work on the Calvert City plant, Dr. M. R. Stevinson and Dr. D. B. Andrews, now at Linden, have been assigned to Dr. Lang's staff to be in charge of process development and process engineering for the division, respectively.

At the same time. Drs. D. I. Randall and W. W. Williams, now at Easton, transferred to the sales department as technical assistants to Dr. J. R. Bonnar, dyestuff sales manager in New York. They will be responsible for the evaluation of dyestuff sales problems in terms of research and development possibilities, and to provide improved communication with the research and development groups under Dr. Lang on those problems.

Other appointments affecting Easton personnel include:—Dr. H. T. Thompson, assistant to Dr. Lang; Dr. J. M. Wilkinson, research manager, new fields; Dr. C. F. Jelinek, research manager, surfactants, and Dr. L. T. Hallett, research manager, analytical services.

Dr. Walsh will continue to maintain his offices at Linden, and Dr. Lang will also establish his principal headquarters there, although continuing his supervision over the Easton laboratory.

Minerals Unit Formed

—Continued from page 5

ing with the Office of Defense Mobilization, and other agencies in planning other production and distribution controls relating thereto.

(8) In conjunction with the Department of Commerce, providing guidance and leadership to the industries in the formulation of plans and programs to insure the continuity and essential production in times of emergency.

(9) Assisting the Office of Defense Mobilization in plans for stockpiling of strategic and critical materials.

Secretary McKay's action in the formation of the new office followed closely the issuance by President Eisenhower of the report of the cabinet committee on minerals policy. This committee made eleven recommendations designed to enhance the security of the nation, to bring about closer government-industry relations in the mining field and also to encourage an orderly and vigorous development of domestic mineral resources.

In addition to the nine-point functional mission of the office, it will guide and assist the General Services Administration in the minerals mobilization functions it now performs under redelegation from the Secretary of the Interior. These include screening and making recommendations on requests for tax amortization, loans, guarantees and procurement contracts for metals and minerals industries. It will also collaborate with the Department of Defense and the Office of Defense Mobilization on security plans for the metals and minerals industries.

Trade Briefs

Pitman-Moore Co., division of Allied Laboratories, has appointed Allen B. Faux controller.

Dr. John C. Krantz, jr., professor of pharmacology at the school of medicine, University of Maryland, has won the Rho Chi citation at the Philadelphia College of Pharmacy and Science.

C. D. Smith, Chicago branch manager for Parke, Davis & Co., has been named to a five-year term on the advisory committee to the University of Illinois College of Pharmacy.

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Essential Oils, Aromatics, Flavorings

The essential oils market last week was disturbed by the deteriorating military situation in the Far East. If the invasion of Formosa is commenced, certain essential oils coming from that area were expected to be greatly affected. Already in short supply, citronella oil prices advanced sharply last week in the wake of the news of the renewed military action off the coast of China. Java type and Java qualities of citronella oil were advanced 25 cents per pound while Ceylon quality oil increased 10 cents, on spot. Sage oil prices were noted to have advanced substantially due to higher raw material costs.

In the first price change in months, Bourbon vanilla beans were reduced 25 cents per pound in the spot market. This slight easing in price was expected to be temporary, however, since the long range outlook was for a continued shortage of beans and probably higher prices than those in 1954. Costs to the curers at origin were reported to have advanced considerably and actually, spot prices in this market were currently under replacement costs. Even if the high price of vanilla should cause some decline in demand, the gap between anticipated world output and consumption was so considerable that shippers were not expected to find it difficult to sell as much vanilla as they please.

Since the ice cream industry is the ultimate consumer of more than half the vanilla brought into this country and with the peak production season only a few months away, it could be reasonably expected that the market would continue to hold at strong levels. The seeds and spices market was reported to be fairly active last week. Black pepper advanced 2 cents per pound while Mexican and Jamaican pimento eased slightly, declining 1 cent. The pepper export tax in India was reported to have been cut in half, a fact which actually caused the price at origin to dip momentarily below levels here, it was said. There has been quite a deal of black pepper landed in New York in the past six weeks and stocks, as a result, were on the strong side.

Italian sage leaves declined 1 cent per pound in the spot market while Ceylon cinnamon #0000 grade, was reduced 2 cents. Niger seed fell off 1 cent and West Indian mace also was down a similar amount.

Price Trends

Advanced

Oil, citronella, Ceylon, 10c. per lb.
Java, 25c. per lb.
Java type, 25c. per lb.
Pepper, black, Malabar, 2c. per lb.

Reduced

Cinnamon, Ceylon, "0000," 2c. per lb.
Mace, West Indian, 1c. per lb.
Niger seed, 1c. per lb.
Pimento, 1c. per lb.
Sage leaves, Italian, 1c. per lb.
Vanilla beans, Bourbon, 25c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
136.03	136.03	138.78	145.14

(For Current Prices see page 9)

Essential Oils

Bergamot—The spot market in this essential oil continues weak as evidenced by the reports that prices were being shaded in some directions. Demand was reported to be fair, on the whole, and supplies adequate for current inquiry.

Birchtar—There was no activity reported in this market last week. Prices were steady and supplies ample for consumer requirements, at present.

Camphor—The spot market held unchanged last week. The supply situation continues tight with little likelihood of any improvement in the near future. The decline in world demand for natural gum camphor has diminished production of this compound and correspondingly, the production of camphor oil. The mounting tension in the Far East, particularly on Formosa, which may be invaded momentarily, has had the effect of keeping the commodity market there on tenterhooks, so to speak.

Cedarleaf—The market was firm with supplies on the tight side. The heaviest production season for this domestic oil is over and there has not been enough made to satisfy the normal demand. Very little oil was produced in country districts last season for a number of reasons, but primarily it appears as if road construction employment was more attractive to the people who normally produce cedar leaf oil. At present supplies are insufficient to cover normal requirements until next Spring even if good weather brings about any added production. Current prices ranged from $2.65 to $3 per pound, depending upon quantity and seller.

Cedarwood—The market continued firm although there appeared to be some easing in demand, of late. Prices on oil from Kenya were noted to have eased somewhat in line with the easier tone in the domestic oil.

Citronella—The attack of the Tachen islands last week by the Red Chinese force intensified the fear that the invasion of Formosa might be near. Prices rose sharply on citronella oil, an item of which Formosa is a prime source. All types of citronella oil advanced in sympathy with the rising market in Formosan citronella oil. The current market ranged from $1.60 to $2 per pound on the Formosan and Java qualities while Ceylon citronella oil was hiked 10c. to $1.20-$1.75 per pound.

Geranium—The spot market for Bourbon geranium oil has gotten stronger, and while a great deal of low quality material has been shipped from France, the genuine product is not in large supply. The summer crop in the island of Reunion was, for all practical purposes, a complete failure. While this crop is usually only one-third the size of the winter yield, it has had the faculty, during the past few years, of balancing the market. Without it, somewhat higher prices are anticipated, because very little oil from the winter harvest is left in the island, it was said. Algerian oil geranium is also in tight supply and will probably be scarce in the immediate future. Production costs have run much higher than anticipated in Algeria and present sales prices are not very remunerative. While the producers actually do not want to see the price go too high, on the chance that it may discourage consumption, they do feel that the oil should sell at a substantially higher price.

Lemon—This market continued quiet, on the whole. Prices were unchanged. Supplies were adequate to meet consumer requirements and were expected to continue in the immediate future.

Lemongrass—There were no price changes noted last week. Demand was generally by manufacturers of citral, which in turn is the starting point in the manufacture of synthetic vitamin A. Demand for vitamin A was reported to be moving at seasonally active levels, it was said.

Peppermint—The spot market remained quite firm last week. Supplies of high test oil were said to be tight and the situation was not expected to improve in the near future unless consumer demand eases.

Petitgrain—The market was steady and unchanged. Haitian petitgrain oil was quoted at $3.50 for shipment. The spot market ranged from $4 to $5.30 on the Paraguan oil.

Sage—The market has advanced rather sharply on this item, it was noted. The current price on Dalmatian sage oil ranged from $5.50 to $7.20 per pound while Spanish quality oil ranged from $1.15 to $1.40 per pound.

Imports Detained by FDA

Week Ended January 14

New York

Amatillo root, 592 bags: other species substituted; caution statement omitted.
Cassia (46 lots), 3,945 bales: filthy.
Chillies (2 lots), 127 bags: filthy.
Cloves (8 lots), 880 bales: filthy.
Coriander seed, 590 bags: filthy.
Elder berries, 34 bags: filthy.
Gum karaya (3 lots), 184 bags: filthy.
Kola Nuts (2 lots), 213 bags: wormy.
Laurel leaves, 89 bales: filthy; contains excess stems.
Mace (6 lots), 67 cases: filthy.
Marjoram leaves, 51 bags: filthy.
Nutmegs (11 lots), 508 bags: moldy and wormy.
Rauwolfia root (5 lots), 480 bags: species not shown; caution statement omitted.
Turmeric, 55 bags: moldy.

Miscellaneous

Cinnamon—Ceylon No. 2 cinnamon held unchanged at 86c. per pound while the "0000" grade was lower at 86c. per pound.

Clove—The spot market was steady on cloves last week. Replacement prices were

For Late Market Developments, See Page 4

reported to be higher than the spot market. A recent report from Zanzibar indicated that the total supply up to June 1955 could be estimated as 8,500-9,000 tons. And the total anticipated demand from India, Indonesia, U.K. and U.S.A., 7,500 tons. The commodity in itself is considered by growers not as produce for export but as a safer investment of their money so that they will not part with their stocks until they really desire to spend something, it was said. Present market prices may rise higher during March-April to the extent of at least 15 to 20% over the present market.

Cumin Seed—The spot market was ready at 12¾c. per pound last week. Demand was reported to be routine.

Ginger—The market was unchanged, piecewise, last week, but very firm. Little or nothing is heard concerning newcrop Jamaica with the exception that traders broad feel the crop will bring at least the present New York market value. They therefore are not willing to make commitments until the actual ginger is on hand. New crop African positions are very firmly held and reports indicate that only a small crop will be available. Cochin tends to be the cheapest grade and as a result, spot stocks are gradually disappearing. Late in the week reports indicate that the Indian market was working higher due to the demand in the Middle East.

Mace—West Indian mace declined 1c. on spot and was currently quoted at $1.39 per pound. East Indian quality was unchanged at $1.40.

Pepper—The spot market advanced 2c. last week on Malabar pepper. The principal factor which steadied the levels here was the firmness of the Indian cables. The reduction in the export duty permitted India's level to dip under the local market, but after the initial decline, it worked itself right back to our levels.

Just what makes India so steady mystifies everybody. They have not been receiving any broad support from the New York market. No great amount of activity is reported which would indicate that other areas are furnishing the necessary offtake. It has been suggested here that growers show little interest in selling under the equivalent of forty cents per pound and therefore, the market at source is maintained.

Despite the attitude taken by shippers at origin, the fact remains that a considerable quantity of pepper has reached this market. Many large consumers were believed to have comfortable stocks at present but an increase in demand could cause prices to strengthen further, it was said.

Niger Seed—Prices declined 1c. per pound, on spot, last week. The current market ranged from 11½c. to 12c. per pound.

Pimento—The spot market weakened slightly with both Jamaican and Mexican pimento declining 1c. per pound. The former was priced at 97-98c. and the latter, at 81-82c. per pound.

Sage Leaves—Italian sage declined 1c. per pound last week. The current market price was 13c. for Italian quality, 11c. to 11½c. for Cretan sage and 40c. on Dalmatian sage.

Sesame Seed—The spot market was very firm in face of reports of a short crop in Nicaragua. The current military disturbances in that area were not exactly conducive to placidity in the trade, it was noted.

Vanilla Beans—Buying activity was stepped up considerably over the last week. For some months previous, the market situation was virtually stalemated. Consumers bought only on a hand-to-mouth basis while spot market prices held at very high levels. Shortly after the turn of the year, Bourbon vanilla prices were cut 25c. per pound to stimulate business and consumers moved into the market fairly strongly. The current price on Bourbon vanilla ranged from $10.50 to $11.50 per pound, depending upon quality and quantity. Prices quoted from origin, however, continue substantially the same. The slight easing in the market here reflected a move by some vanilla holders in Madagascar to sell some quantity of beans to raise ready cash. The overall vanilla outlook, however, has not changed. A look at expected production totals and consumer requirements makes this fact self-evident.

Even estimating some slight decline in consumption due to the high price of vanilla beans, the outlook for 1955 was for supplies to remain short of world demand. Consumption in the United States has been estimated to approximate 700 tons annually in addition to which the rest of the world consumes some 150 to 200 tons in an average year. Therefore, total consumption should run anywhere from 850 to 900 tons next year while available supplies both at origin and in dealers' hands may run some 200 tons behind demand.

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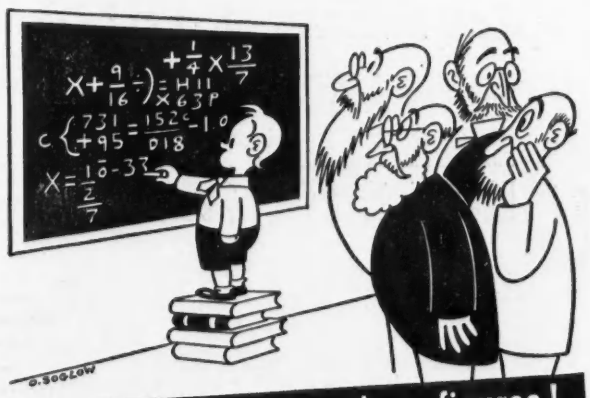

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Oil, Paint and Drug Reporter

Drug Statute Overhaul Urged for Additives

—Continued from page 5

population with their widely differing eating habits.

Finally, he said, "The most difficult hurdle to surmount is that we are trying to prove a negative, to prove that injury will not develop. This is a logically unsound aim, actually impossible to accomplish. The difficulty is usually by-passed by the use of unproved tacit assumptions which experience supports."

"After a new ingredient enters food," Mr. Smyth suggested, "it would be well if an attempt were made to verify predictions by showing that it is actually safe in practice. If safety has been conscientiously studied in advance, it is practically certain that no overt injuries can result. In the ordinary course of events minor non-specific injuries will not be reported. How will they be recognized and traced to their source? It would be well if there were some mechanism by which the advance predictions of safety could be certified after widespread use of an ingredient begins."

Dr. Henry R. Kraybill, director of the American Meat Institute Foundation, said that the meat industry wants new chemical additives which will improve the acceptability or nutritive value of a product, or one which would prolong the keeping time of an item. However, he said, "we believe that no chemical should be added to foods if there is any reasonable doubt regarding the safety of its use."

"When a new chemical is proposed for use and adequate information is not available regarding the safety of its use in food," Dr. Kraybill explained, "the meat inspection branch of the Department of Agriculture requires that adequate toxicity and feeding tests be carried out. These proposed tests may be reviewed with the meat inspection branch and representatives of the federal Food and Drug Administration before they are undertaken. When adequate information has been obtained to demonstrate safety in the opinion of the Food and Drug Administration, the meat inspection branch may issue a regulation permitting the use of the chemical or additive in certain definite limited amounts."

Additives Classified by Use

A classication of chemical additives on the basis of use was made by Rufus A. Barackman of Victor Chemical Works, Chicago. He said that their main functions are to prevent spoilage of raw and processed foods, to enhance nutritional quality and to improve physical properties.

"The chemical industry," he indicated, "is cognizant of the seasonal demands of food processors. It must also be alert to any changes in the food habits of the consumer. One recent change, that of improved distribution facilities, is of immediate importance. Enlarged refrigeration and freezing facilities and the home freezer have resulted in a shift in the technological approach from pre-cooked foods to the storage of freshly harvested products. This change in the economy reflects in a lessened demand for some chemicals and an increased demand for new, highly functional chemicals."

Parker Friselle, manager of market research at Dow Chemical Company, Midland, Mich., discussed three types of chemical food preservatives—those added to a food product for the specific purpose of preserving it, materials added to a wrap to preserve the enwrapped food and fumigants used specifically to preserve foods by destroying micro-organisms. He noted that there are four main ways in which food spoils—by bacterial and mold action, by oxidation, by enzymatic action and by changes in physical state.

Solving Spoilage Chemically

Looking at what has been done chemically to solve these four kinds of spoilage, Mr. Friselle said, "Changes in physical state are due largely to changes in texture brought about by bacteria or mold atcion and changes brought about by loss of water. Loss of water, for example in bread, while not detracting seriously from the edibility of the bread, certainly does detract from its accepted qualities.

"Attempts to retain moisture in bread have taken the form of using propylene glycol, not very successfully, polyoxylene stearates, sorbitols and mono- and diglycerides, quite successfully, except for food standards, while other attempts to prevent water loss, such as putting more water in the product initially and storing the product in a moist atmosphere, usually lead to bacteria or mold spoilage and have been very successful.

"The control of undersirable enzyme changes," he went on, "has been coped with by both physical and chemical methods. The use of blanching with steam or hot water has been very successful in preventing many types of enzyme col changes in the preparation of foods. number of chemicals have been discover which will inhibit the enzyme action lea ing to discoloration such as ascorbic ac as used in the prevention of discoloratic of fresh peaches. From time to time mil bleaching agents such as hypochlorit have been used not to prevent the enzyn action but to bleach the resulting color,

"The most successful attempt to use food preservative which has subsequentl converted to a material that was harmles and acceptable to the federal authorities, Mr. Friselle pointed out, "has been th use of propylene oxide as a so-called fum gant. In this application, a small mea ured quantity of propylene oxide is i jected into a box of food product jus prior to closing the box. Propylene oxid here acts as a fumigant and inactivate bacteria and fungas. Subsequently, pa of the gas escapes from the box, wai the balance converts by means of th natural moisture in air to propylen glycol."

The feed manufacturing industry, i little more than a dozen years, ha doubled in tonnage, it was noted by Tor Brinegar, research director for *Feed Ag* magazine. Currently, he said, the indus try is about 4 percent ahead of last yea with a 1954 volume of some 35,000,00 tons.

According to a recent market researc study, he went on, there are 6,000 fee manufacturers. Of these, some 1,250 d 80 percent of the business, another 3,75 do 14 percent and 1,000 account for th remaining 6 percent of the total volume Chemical products are rapidly increasin in both number and importance in manu factured feeds, Mr. Brinegar said, addin that the need for new and improvec chemical compounds of many types is als an ever-increasing one.

Shift in Shopping, Eating Habits

The changing shopping and eatin habits of Americans have brought nev requirements in food sanitation, C. W Weinrich, research director of the Cherry Burrell Corporation, Chicago, told th group. Particular emphasis, he said, i now being placed upon increasing th shelf life and refrigerator life of food as well as making a wider variety of pack age foods available.

Dr. Roger P. Link of the University o Illinois said that the chemical industry can greatly help veterinarians to overcom disease losses in food-producing animals These losses, he pointed out, amount t millions of dollars annually. "What we need most," Dr. Link said, "are effective therapeutic agents for virus, rickettsia and fungal diseases and certain parasites."

Dr. G. P. Whitlock of Merck & Co., Rah way, N. J., in a discussion of "Vitamins and Growth Factors," recounted how vita mins entered the feeding picture. He went on to the subject of minerals as growth factors, touching on the roles o iron, copper, manganese and iodine in this connection. He explored the use of anti biotics, proteins, amino acids, other drugs and hormones as feed supplements.

Summing up the progress that has been made in feeding, Dr. Whitlock said, "The significance of each new discovery and develpment is sometimes difficult to evaluate individually. But if comparisons are made on an 'in toto' basis, the full significance is striking."

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Petroleum Derivatives

Activity in the petroleum derivatives market last week was steady with no price changes reported. All products sold at previous quotations and sales, for the most part, were at normal seasonal demand. No unusual changes were forecast by industry sources.

Appearance of a little more competition was said to be evident among the aromatics, particularly the partial material. There was still good movement for toluol and xylol. There were sufficient quantities of VM&P naphtha and cleaners naphtha available and production was in excess of demand. Demand for heptane and hexane continued to be quite active with vegetable oil extractors taking large amounts. Mineral spirits moved fairly well and were supplied adequately from present production.

Lower temperatures in the east have increased somewhat the movement of propane and butane. Nevertheless, producers said they were not having any trouble filling orders although some had dipped into underground supplies. The wax market remained in its excellent condition with only seasonal changes noted.

Solvents and Diluents

Benzol—Demand for petroleum source benzol has picked up slightly since the price reduction by some producers earlier this month. It was said that the DDT producers were taking more benzol for use in production as government orders increased. Other users were also said to be increasing their demand for benzol. The market was still well supplied.

Cleaners Naphtha—Activity in this market has held up fairly well. Sales would normally expected to be low, seasonally in this market. But demand was slightly better than the calendar might indicate that it should be. Prices were steady and unchanged.

Heptane—The market for this solvent was reported to be steadier as demand for vegetable oil extractions was sustained. Prices have remained firm. Supplies of heptane were adequate to take care of current needs.

Hexane—Demand for lacquer diluents was said to be a little better in recent weeks. Supplies of the solvent were adequate for consumer requirements. Prices were unchanged.

Mineral Spirits—Producers reported that demand for mineral spirits was holding up a little better than they had anticipated. Buying interest had slowed down in the late weeks of last year, as was expected for the season. However, the demand for mineral spirits never did expand enough to offer any encouragement to suppliers during the last quarter of 1954. It was felt that inventory adjustments which took place in the closing weeks have resulted in an improved situation now. Prices were firm at former listings. Supplies were adequate to meet consumption requirements.

Partial Aromatics—Demand for most partial aromatic solvents held up pretty well over the past week, as consumers reordered at a fairly good pace. Not all producers were entirely encouraged about the present state of the market, but most agreed that partial aromatics did not display the overall weakness that was evident for some full aromatics. Prices were firm at previously established quotations, and no movement toward a change in either direction was encountered during the week.

Toluol—This aromatic was said to be relatively unchanged last week. Consumers were able to get enough toluol for their wants. Prices remained firm at former quotations. It was said that there was less competition in markets for pure aromatics than there has been among the partial aromatics lately. Greater availability or aromatics in general has improved supplies and made for keener competition for those materials.

VM&P Naphtha—Prices remained steady at former quotations. Supplies were ample enough to accommodate consumers' requirements. This material is a relatively small item in the overall solvent market, sources said.

Xylol—There has not been any significant shift in this market. Producers were moving current production readily. Some sources said that they would be able to move a bit more if they had it. Other suppliers stated that they felt the market was moving towards better availability in general. Quotations were unchanged from old levels.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 25 1954
104.75	104.75	104.75	105.31

(For Current Prices see page 9)

Lighter Fractions

LPG's—Producers reported that demand remained firm. There has been some spurt with more cold weather but suppliers were said not to be having any trouble meeting their commitments. However, most sources have started to dip into underground storage. Contract prices were unchanged.

Waxes

Microcrystalline—Buying interest for microcrystalline waxes was still strong. Some producers continued to report demand was ahead of supply. There was a slight amount of easing in the opening weeks of January, but inquiries were coming back, a source said. Prices were firm.

Paraffin—The market was described as being in balance by producers. One or two grades continued to be a bit snug with individual suppliers. Demand was not quite as strong as it had been in December, before package differentials increased.

Miscellaneous

Crude Oil—The daily average production of crude oil and lease condensate for the week ended January 14, 1955, was 6,689,200 barrels of which 110,400 barrels were lease condensate mixed with crude oil losing its identity as such. Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 7,370,000 barrels of crude oil daily and produced 24,784,000 barrels of gasoline; 2,822,000 barrels of kerosene; 12,029,000 barrels of distillate fuel oil and 8,737,000 barrels of residual fuel oil during the week; and had in storage 162,198,000 barrels of finished and unfinished gasoline; 27,677,000 barrels of kerosene; 100,111,000 barrels of distillate fuel oil and 50,566,000 barrels of residual fuel oil on January 14, 1955.

The Texas Railroad Commission has set an oil quota of 3,241,438 barrels daily in February, keeping production at about the same level as for January. The present allowable of 3,279,765 barrels daily is the second highest in history, about 150,000 barrels below the record of November, 1952. The February order averages 38,327 barrels a day less than the present rate. The difference will be wiped out by allowables assigned to new wells during the summer.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended January 8 totaled 259,460,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 261,486,000 barrels for the preceding week, this represents a decrease of 2,026,000 barrels, comprising a decrease of 698,000 barrels in stocks of domestic crude and a decrease of 1,328,000 barrels in stocks of foreign crude.

Los Angeles Petroleum Market

The solvent and diluent market was relatively unchanged during the week with demand holding at a good level. Supplies were adequate to meet all requirements. Listings were firm and unchanged. Lacquer diluents quoted 20.4c. per gallon, 400 gallons or over, ex-tax, f.o.b. Los Angeles Basin area. Cleaning solvents, including Stoddard, quoted 19.4c. per gallon, same basis.

Propane continued to witness more interest than in weeks past; supplies remained ample. Postings unchanged at .059 per gallon, tankcars, f.o.b. Los Angeles. Extremely cold weather conditions pushed demand for butane even higher with heavy call from interior Valley regions. Stocks in the Basin area remained limited. Quotations firm at .069 per gallon, tankcars, f.o.b. Los Angeles.

For Late Market Developments, See Page 4

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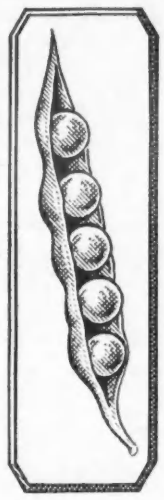

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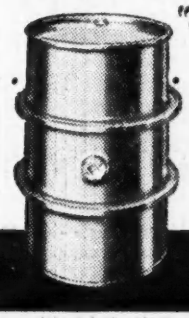

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Protective Coatings Materials

Some advance buying in inorganic pigments was noted before the increases at the first of the year, and demand since then has been quiet. Consumption of most pigments, in fact, remained slow except for iron oxides, which were moving quite well. Prices were steady. A reduction in dichlorobenzidine failed to change quotations for benzidine yellows. Pigment manufacturers looked ahead with confidence because of a generally prevalent good tone. Demand for paint grade carbon black was quite active, with a big push on chassis paints noted from the automotive industry. The high color blacks continued to suffer because of the trend away from black in the automobile industry, but the total business for high grades is still increasing. Higher export demand helped push sales upward.

Paint demand for alkyds was active in a well supplied market. Urea-formaldehydes were kept moving by a well sustained demand. Prices for phthalates were steady. Some producers believed that price reductions for DOP and others were a thing of the past, and cited the firm cost of raw materials as their reason. Demand for nitrocellulose held up well, but made no spectacular advance over the past weeks. Copal gums were decidedly firmer because of strength at the source. The grades advanced were Manilas, Philippines, and Pontianak. The chief cause of the strength seemed to be foreign consumers who were bidding up prices. India grades were available on the market at relatively low prices, mainly because they had not received as much attention from foreign buyers.

Shellac quotations remained quite firm, because of the continued strong attitude in Calcutta. There appeared as yet to be very little sign of weakening. Demand from consumers was reported fairly active. Of interest in the naval stores market was the Agriculture Department decision to support prices of gum naval stores again in 1955 at 90 percent of parity. Props for gum turpentine were scheduled at 50 cents per gallon and for the average grade of gum rosin at $7.43 per 100 pounds. Supplies of calcium carbonate were just about in balance with demand. Obtaining shipments of carlot size at times required advance notice of several weeks, but smaller lots ordinarily could be shipped without delay.

Prime Pigments

Carbon Black—Demand for paint grades was reported good over the past week. There is currently a big push on chassis paints from the automotive industry, it was stated in the industry. Tire producers have maintained an active demand, and have made encouraging statements concerning their expected level of business during the weeks just ahead. The high color blacks continued to suffer because of the trend away from black in the automobile industry. However, the total business for high grades is still increasing. Higher export demand helped push total sales upward.

Iron Oxides—Buyers have come into the market fairly actively so far this month, according to a consensus of opinion among makers. Demand seemed to be somewhat more active than for most other pigments. Some makers believed that consumers had eased off in their buying at the end of the year and now found themselves shorter on supplies than they expected. Overall demand was thus at least as good as usual for January, and in some instances decidedly better.

Lead Pigments — Consuming demand held up quite well, and was filled without difficulty from current production. Previously established price schedules were unchanged. With the price of lead currently showing no tendency to change, pigments were also firm.

Titanium Dioxide — This market remained steady since the beginning of the year. As in other pigments, demand has been described as quite satisfactory by producers. Stocks were maintained at a good level and were easily able to fill consumers' needs, in spite of the overall upward trend in consumption. Prices were considered stable at present levels.

Yellows—Benzidine and other grades which advanced in price at the first of the year remained steady. Consumers were thought to be fairly well stocked, and were in no hurry to buy more than their immediate needs. One producer of pure iron oxide recently raised its quotation for light shades, which earlier had been the same as the listings for darker yellow and oranges. The new price for the light yellows is 11¼c. per pound in carlots, and 11¼c. per pound for l.c.l. shipments. Darker lemons and oranges remain priced at 10½c. in carlot quantities and 10¾c. for l.c.l. shipments. The change was brought about because of the longer time required in making the light shades, and the consequent higher production costs. A reduction in the price of dichlorobenzidine failed to produce changes in the prices of benzidine yellows, which were stable after advancing at the first of the year.

Zinc—Dust was steady over the past week without changing from earlier quotations. With the metal holding steady, there was no pressure in the making for changes in related materials. Demand has been rated as good by most in the industry, although the bulk of ordering for spring painting needs has not gotten under way as yet.

Zirconium Oxide—The supply position remained quite favorable to the consumer, as production has been ample for consumers' current levels. Prices held steady since the first of the year. Producers at the present saw no reason to change their schedules.

Synthetic Resins

Alkyds — Paint demand was described as good over the past week. In fact, the good tone in this area was taken as an indication of a healthy undertone throughout the market. Although consuming demand was active, there still remained ample amounts of material on the market, as production remained ahead of immediate requirements.

Maleics — Prices made no significant changes in the past week, although they continued to show some weakness here and there. This weakness, however, was not considered in excess of the type of weakness that has been exhibited in this particular market for most of the past year.

Urea-Formaldehydes — A good demand has kept material moving along to consumers at a satisfactory rate, according to reports in the industry. Supplies were held to be quite adequate for the present level of requirements and for expansion over the coming months, as well. Prices were unchanged.

Lacquer Materials

Dioctyl Phthalate — Producers believed that price changes are now a thing of the past. The basis of this thinking appeared to be the firm costs of the raw materials, which would make reductions practically out of the question. Naphthalene prices were stable at their recently advanced levels, and phthalic anhydride was considered quite steady.

Di-Iso-Octyl Phthalate — Demand was reported good but not up sharply from that of recent months. Present production schedules were well able to keep abreast of market demand. No shift in prices was expected in the weeks just ahead.

Nitrocellulose — One producer reported that market demand was holding up quite well and that the present level could be considered satisfactory, if it continued for the quarter. Existing quotations were maintained without change.

Natural Resins

Gums—Copals were decidedly firmer over the past week, with higher prices effected because of strength at the origin. Manilas, Philippine, and Pontianak grades were up from ½ cent to 3 cents per

Price Trends

Advanced
Casein, Argentine, ¼c. per lb.
Gum, Copal, Manila, DBB, 2c. per lb.
DE, dust, 2c. per lb.
Philippine, pale, nubs, 2c. per lb.
seeds, 1c. per lb.
sorts, ½c. per lb.
Pontianak, chips, 3c. per lb.
nubs, 1c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
97.11	97.08	97.06	93.66

(For Current Prices see page 9)

For Late Market Developments, See Page 4

pound. India grades of material were relatively cheap, chiefly, it was believed, because these grades had not received so much attention from foreign consumers. The DBB Manila and Philippine grades were not offered freely, and while other grades were available, they displayed a firmer undertone. The chief cause of the strength seemed to be that foreign consumers were bidding up the prices.

Shellac—Due to a very firm attitude at Calcutta, prices held firmly to their previous levels. There appeared to be very little sign of weakening, if any, in this market. Prices for Lemon grades were quoted at 60 cent per pound for No. 1 and at 58 cents for No. 2. Superfine was quoted at 56 cents and TN at 55 cents. These quotations were listed in the nominal category. Demand from consumers in this country was reported as quite good.

Fillers and Inerts

Asbestos—At the present time, the demand for asbestos paper is lower than at any time during the year and competition is severe, due to excess of supply over demand, it was reported in the industry. The demand for millboard is reported about equal to that of 1953, with slightly more small orders being received this year. Some improvement has appeared in demand for high pressure insulation material, particularly in the requirements for block. There is also an increase reported in the demand for high temperature materials indicating that some of the influx is for processing industries.

Miscellaneous Materials

Casein—The market for Argentine material displayed a firm tone at the source, but at the same time was marked by consumer resistance in this country. Principals in the Argentine appeared to feel that they could hold out for slightly higher prices because at the present time they are experiencing no competition from other producing countries. However, consumers locally realized that in another month or so European producing countries will be ready to re-enter the market. The big question mark was just how soon France and other European producers would have material for sale and just how large a production they could offer. Spot prices of Argentine material, duty paid, edged up ¼ cent per pound during the past week to stand at a range of 22¼ cents to 22½ cents per pound.

Naval Stores

Central gum still production during December totaled 8,080 barrels of turpentine and 30,980 drums of rosin, according to Agriculture Department figures. The seasonal decline from November to December was reported to have been considerably larger than usual. The upward trend in the production of steam distilled wood rosin continued with December production reported at 116,810 drums. At the end of December, 81,080 barrels of gum turpentine and 743,810 drums of gum rosin were held at locations covered in the department's reports. Gum turpentine stocks declined 7,530 barrels during December, while gum rosin holdings decreased 28,240 drums.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Jan. 14	Mon. Jan. 17	Tues. Jan. 18	Wed. Jan. 19	Thur. Jan. 20
Drums—					
F	...	...	...	$8.08	...
H	...	...	...	8.12	...
I	...	...	...	8.12	$8.22
K	...	...	$8.40	8.12	8.22
M	$8.20	...	...	8.12	...
N	...	...	...	...	8.05
WG	...	...	...	...	8.10
WW	8.42	...	8.28	8.36‡	8.36
Bags—					
N	...	...	8.05	...	...

Tankcars (for week ended January 14)—
M $8.14, 600*; N $8.30, 242*; WG $8.23, 180*

Sales, USDA
240* 589* 710* 400* 289*

New York
(per 100 lbs., c.l., Friday)
B through M $9.10, N $9.15, WG $9.20, WW $9.35

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.555	.671	.555	.558	.676
Sales	8,000	1†	4,000	4,000	1‡

New York, Friday, per gal. 7 lbs., tankcars, 62½c., l.c.l. 73c.

*Drums equivalent. †Tankcars. ‡Carlots. §Average price.

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Low cost

Properties

INDOPOL POLYBUTENES

GRADE	L-10	L-50	L-100	H-35	H-50	H-100	H-300
Average Molecular wt.	330	420	470	660	700	780	940
Viscosity							
Saybolt seconds at 100°F	114	516	1040	7900	14000	44000	140000
at 210°F	40.6	66.5	93.8	375	540	1010	3000
Poises at 77°F	0.36	2.0	4.8	38	75	200	800
Gardner-Holdt at 77°F.	A-1	H	R	Z-2	Z-4	Z-6	Z-9
Viscosity Index	100	105	102	—	—	—	—
Weight-Volume							
Specific Gravity 60°/60°F	.831	.847	.854	.871	.878	.881	.894
Pounds/gallon	6.92	7.04	7.11	7.25	7.31	7.34	7.44
Color							
N.P.A. or A.S.T.M.	1.5	1.5	1.5	1.5	1.5	1.5	<1
Flash (Tag), °F	230	235	245	280	295	360	475
Pour Point (ASTM) °F	−65	−35	−25	0	5	+20	+35
Iodine No.	83	46	43	36	34	33	32
Refractive Index (20/D)	1.4655	1.4730	1.4759	1.4860	1.4886	1.4918	1.4955

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Science Foundation Report Stresses Teacher Shortage

The shortage of trained science and mathematic teachers in the secondary schools of the United States is being stressed in the fourth annual report of the National Science Foundation. In view of the greatly increasing student body resulting from the high birth rate during the war and post-war years, the teacher shortage may be expected to become still worse and will extend to the colleges as the population bulge advances to that point, the report continued.

Despite this anticipated increase in the total number of students, however, there is still a large proportion of talented youth who fail to continue their education beyond high school, the report stated. Three out of five of the top eighth of the young people in intellectual capability do not complete a college education at the present time. There are no simple solutions to the problem of increasing the potential of highly trained scientific and technical manpower, the report added. The high cost of a college education is one factor, but lack of motivation is probably even more important as a reason for the failure of many high-ranking students to continue their schooling. The report notes the steps taken by the foundation and other federal agencies to implement the executive order concerning government scientific research issued by President Eisenhower last March. It also reports on the program of the United States Committee for the International Geophysical Year, a cooperative research program to be undertaken over the next several years, in which thirty-eight nations are expected to participate.

Herbicide Properties Related At Weed Control Conference

A new pre-emergence herbicide which field studies indicate will eliminate weedy grasses from certain grass as well as broadleaf crops without injury to the crop was described last week at the Southern Weed Control Conference in St. Petersburg, Fla.

Dr. L. H. Hannah, of the organic chemicals division of Monsanto Chemical Company, said that the new weed killer, 2-chloroallyl diethyldithiocarbamate (CDEC), has given excellent control of grasses at rates ranging from three to six pounds per acre. "Effective control of annual weedy grasses in corn and soybean rows was obtained by thirteen-inch band treatments using less than two pounds per acre," he said.

The new material is similar in performance to a-chloro-N,N-diallylacetamide (CDAA) and a-chloro-N,N-diethyl-acetamide (CDEA) which the company announced in 1954, Dr. Hannah said, and was field tested at the same time. Legal requirements prevented its announcement earlier. CDEC appeared to give slightly better grass control than CDAA and CDEA at all locations of a cooperative field program to determine if the new herbicides could selectively control annual grasses in corn, Dr. Hannah reported. He said that both classes of materials are still in an experimental stage and estimated that at least another year of field trials in cooperation with growers and experiment stations would be needed before they could be made available commercially.

Resin Facility Addition Announced by Hercules

Additional manufacturing facilities for the production of wet-strength resins for paper will be built at its Holyoke, Mass., plant, according to an announcement by the paper makers chemical department of Hercules Powder Company, Wilmington, Del.

The new production unit is expected to be in operation the early part of the second quarter of 1955. The wet-strength resins will be available in tankcar, tank truck, and drum quantities from the new unit. The Holyoke plant also produces wax emulsions, and defoamers for the paper industry and is a distribution point for dry rosin size and paste rosin size.

Pitts. Plate Announces Retirement of Vice-Pres.

Richard B. Tucker, executive vice-president of Pittsburgh Plate Glass Company, Pittsburgh, Pa., since 1947, has relinquished that position and reduced his work schedule to a half-time basis. He will retain the title of vice-president and continue general supervision of glass research, foreign operations and the export department, according to an announcement by Harry B. Higgins, president.

A director of Pittsburgh Plate Glass since 1942 and a member of the firm's executive committee, Mr. Tucker will continue to serve in those capacities. Mr. Tucker's responsibilities in the glass manufacturing division have been assigned to David G. Hill, vice-president.

Naval Stores Loan Program

—Continued from page 3

loan specifications and be in approved storage tanks.

Under the 1954 program the support price was $130.33 per production unit, 90 percent of parity as of January 15, 1954. Loans were made on 59,316 drums of rosin and 14,659 barrels of turpentine of which 53,894 drums and 14,654 barrels had been redeemed through December 29. It is expected that the small unredeemed quantities will be liquidated before the maturity date of the loan on July 1

The 1955 program is substantially the same as that in effect in 1954, except that a premium of 10 cents per 100 pounds net has been established for the two highest grades—X and WW above the base loan rate for the average grade, WG, and there is a discount of 10 cents per 100 pounds on grades below WG. Last year, grades X, WW, and WG all had the same loan rate.

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Oils, Fats and Waxes

There was noticeable slackening in buying interest for oils and fats last week. Trading was limited, chiefly for prompt delivery. Soybean oil was irregular with January soybeans, but closed unchanged. Cottonseed oil was slightly lower, while crude peanut dropped sharply.

Animal and vegetable fatty acids were higher, reflecting recent price advances of basic materials. All grades were lifted ½ cent per pound, with the exception of coconut, up 1 cent per pound. Trading in most grades was quite active, before the higher schedule became effective. Vegetable oil foots were reported sold up and corn, cottonseed and soybean acidulated were raised fractionally.

Tallow and greases were unsettled but closed steadier, regaining a slight decline. Soapers absorbed moderate quantities of bleachable fancy at the lower levels. Choice white grease grades were scarcer and fractionally higher Edible tallow dropped sharply. Lard continued unsettled and lower. Oleo oil and oleo stearine also declined fractionally.

A weaker tone developed in crude coconut oil and shipments were materially lower, with copra, which reflected the reduced demand for European delivery. Palm kernel oil also was easier, due to the decline of coconut.

Tung oil continued firm while other drying oils were none too steady. Trading in tung oil was light, but stocks were firmly held for prompt and forward delivery. Consuming demand for linseed oil lacked snap, and was restricted to fill-in needs. Carlots were quotably unchanged, with intimations that firm bids could have shaded asking prices several points. Continued quiet demand for oiticica caused prices to drop fractionally.

Price Trends

Advanced

Acid, coconut, 1c. per lb.
Corn, ½c. per lb.
Cottonseed, ½c. per lb.
Oleic, ½c. per lb.
Palm, ½c. per lb.
Soybean, ½c. per lb.
Stearic, ½c. per lb.
Tallow, ½c. per lb.
Grease, choice white, ½c. per lb.
Oil, foots, corn, ¼c. per lb.
cottonseed, ½c. per lb.
soybean, ¼c. per lb.

Reduced

Copra, $7.50 per ton.
Cottonseed meal, $1 per ton.
Lard, ⅜c. per lb.
Oil, coconut, crude, ⅞c. per lb.
Cottonseed, crude, ⅛c. per lb.
refd., ⅛c. per lb.
Oiticica, ¼c. per lb.
Oleo, ½c. per lb.
Palm kernel, ¼c. per lb.
Peanut, crude, 1¾c. per lb.
Oleo stearine, ¼c. per lb.
Soybean meal, $2 per ton.
Tallow, edible, ¾c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 22, 1954
112.44	113.37	113.32	105.80

(For Current Prices see page 9)

Vegetable Oils

Castor—Domestic oil moved in steady volume against contracts. No. 1 Brazilian oil was quiet and offered at 14½c. per pound, tankcars, New York, prompt delivery.

Coconut—Trading was reported slow. Crude was lower at 12c. per pound, tankcars, f.o.b. Pacific coast, prompt and 13¼c. per pound, New York basis.

Corn—Crude was unchanged and steady at 13⅛c. per pound, tankcars, f.o.b. mills. Refined was quiet and unchanged at 16⅝c. per pound, tankcars, New York delivery.

Cottonseed — Cottonseed oil futures backed and filled, closing practically unchanged for the week. Trading for speculative account was moderate and was reflecting in the steady increase of the open interest, which was over 1,600 contracts, the highest total in some time. Market lacked new feature and was influenced by January soybeans which dropped sharply Thursday the last trading day of the option. Cash demand for oil was slow. Refined salad oil was lower and quoted at 16½c. per pound, tankcars, New York, prompt delivery. Crude cottonseed oil was quiet. Tankcars were quoted slightly lower at 12⅞c. per pound, in the southeast; 12⅝c. was bid in the Valley and 12⅜c., nominal Texas.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended January 21 follow:—

	Sales	Cents per pound—High	Low	Close
March	43	15.09	14.96	15.08S
May	77	15.14	15.00	15.14S
July	137	15.08	14.95	15.08S
September	25	14.87	14.85	14.90@14.95
October	3	14.84	14.80	14.84@14.89
December	16	14.81	14.75	14.82@14.92

Total sales, 301 contracts.

Memphis.—Crude cottonseed oil quoted at 12¾c. per pound, tankcars, f.o.b. mills. Crude soybean oil, 12c per pound, tankcars, January. Market quiet. Cottonseed meals, $71.50 per ton, sacked, Memphis; hulls, $15 per ton, bulk and $20 sacked Memphis.

Linseed—New business continued restricted to fill-in needs, with consumers showing practically no interest for carlots. Deliveries against contracts, however, continued to improve, moving in good volume. Raw oil was offered at 12.3c. per pound, tankcars, Minneapolis January-March and 12.5c., April-June. With buying interest slow, firm bids could have shaded these levels for sizable quantities.

CCC offered 3,395,558 gallons of off-specification raw linseed oil on a bid basis. Offers should be submitted to the Cincinnati office, not later than 2 P.M., January 26. The oil is located at Curtis Bay, Baltimore, Md. Previous sales of this grade have amounted to about 5,292,762 pounds.

Flaxseed—Market quiet and lower. Trading was quiet.

Minneapolis.—Trade in flaxseed remained dull and the only feature was that crushers continued to reduce bids on spot and to-arrive offerings. Bids were down to $3.32 a bushel but most seed was purchased at $3.34 and $3.36 a bushel, Minneapolis basis. Spot cash market purchases amounted to only 10 cars while to-arrive bookings ran to 20 cars and 35,000 bushels in trucklots.

Receipts and shipments of flaxseed, in bushels, were as follows:—

	Receipts 1954-55	Receipts 1953-54	Shipments 1954-55	Shipments 1953-54
Past week.	323.750	378.000	47.250	49.000
Since Sept. 1.	18,136.350	12.850.570	4.011.000	2.614.950

Oiticica — Slow demand unsettled the market and quotations were off fractionally. Tankcars were quoted at 14¾c. to 15c. per pound, New York, prompt delivery. Drums were lower at 16¼c. to 16¾c. per pound, depending upon quantity.

Olive—Business was light and spotty. Prices were well held at current levels. Spanish was quoted at $2.35 to $2.45 per gallon, drums, spot, duty paid, and Tunisian, $2.25 to $2.30, same basis. Primary markets were unchanged and steady.

Palm Kernel — Market was easy and lower, with the decline in coconut oil. Denatured oil was quoted at 13c. per pound, tankcars, New York, prompt delivery.

Peanut—Sales of crude were reported as low as 18c. per pound, tankcars, f.o.b. mills. Imported oil was quoted at 17½c. per pound, f.o.b. ports, February-April shipment. Refined oil was nominal at 22¼c. per pound, tankcars, New York basis.

Soybean—Crude was irregular, with soybeans, but closed steadier following the expiration of the January option. Business was slow. Crude oil was sold at 12c. per pound, tankcars, Decatur, January, following sales at 11⅞c. February was sold at 11⅞c., March 11¾c., and April-June, 11½c., same basis. Refined salad oil was quoted at 15c. per pound, tankcars, New York, prompt delivery.

Sales and prices of crude soybean oil futures on the N. Y. Produce Exchange in tankcars (60,000 pounds) for the week ended January 21 follow:—

	Sales	Cents per pound—High	Low	Close
March	12	11.75	11.70	11.85@11.95
May	17	11.73	11.51	11.70@11.75
July	18	11.57	11.40	11.55@11.63

Total sales, 47 contracts.

Tung—Business was less active, but the market remained steady. Trading was reported at 22¼c. and 22½c. per pound, tankcars, New York basis for prompt and later delivery. Drums were maintained at 23¾c. to 24¼c. per pound, according to quantity and seller.

Miscellaneous

Castor Beans — Market was quiet and nominal at $104 per ton, f.o.b. Brazilian ports.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds—Beans	Oil
Last week	1.465.050	830.000
Previous week	10.679.100	3.340.000
Corresponding week, 1954.	2.031.000	.....
Total this year	13.908.600	5.330.000
Corresponding period, 1954.	12.421.200	1.250.000

Cocoa Butter—Market was firmer and

For Late Market Developments, See Page 4

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advanced to 82c. to 86c. per pound, as to quantity.

Copra—Shipments were easy and lower. Prompt shipments declined to $170 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases—Market was irregular but closed steady regaining early decline. Choice white grease was higher. Stocks of not all hog choice white were scarce and prices were higher and nominal at about 8⅜c. per pound, tankcars delivered. All hog also was stronger and advanced to 9c., same basis. Yellow grease was sold at 7¾c. per pound, tankcars delivered. House was nominal at 7½c. and brown, 6⅝c., same basis.

Lard—This market was irregular and fractionally lower. Cash lard was quoted at 12.65c. per pound, drums, Chicago.

Oleo Oil—Slow business and increased stocks weakened the market and prices dropped fractionally. Extra was lower at 16½c. to 16¾c. per pound, drums as to quantity. Oleo stearine also was easier declining to 12½c. to 12¾c. per pound, barrels, as to quantity.

Tallow—Market irregular but closed unchanged.

Export business was reported inactive.

Soapers purchased bleachable fancy at 8⅝c. tankcars, which closed at 8¾c. Extra was quoted at 8½c.; special, 8c., and No. 1, 7¾c. Edible dropped sharply, with trading reported at 10¾c. per pound, same basis.

Fatty Acids

This market was firmer and higher as a result of increased cost of basic oils. Prices were lifted ½c. per pound, for oleic, stearic and tallow acids. Vegetable grades also were raised ½c. for corn, cottonseed, palm and soybean acids, while coconut was boosted 1c. per pound. Trading was quite active before the advance became effective. Withdrawals against also continued at a steady pace last week.

Cake and Meal

Cottonseed Meal—Trading of late has been in spurts and usually after one or two oil mills decided to cut prices in order to move stocks. Buyers continued to purchase hand-to-mouth. Supplies are ample throughout the southeast. Quite a few of the oil mills are stretching their operations this season to run on part time basis for at least a couple more months. Meal forty-one percent was quoted at $71 to $71.50 per ton Memphis; $72. North Alabama; $75. Georgia and $74. South Carolina mills for January through March shipment.

Linseed Meal—Trading was light and spotty. Market unchanged and steady.

Minneapolis.—Demand slackened but the limited amounts available for January delivery tended to hold the market fairly steady. Extracted linseed meal, 36 percent protein, was quoted unchanged at $68 a ton, bulk, in carlots, f.o.b., Minneapolis, but resale stuff was reported available at around $67, bulk. Expeller meal, 32 percent protein, was priced $4 a ton higher than extracted type

Shipments of linseed meal, in pounds, were as follows:—

	1954-55	1953-54
Past week	16,980,000	17,580,000
Since Sept. 1	302,100,000	301,390,000

Soybean Meal—Buyers are covering mostly nearby shipments with trading in forward delivery still limited. Mills report the movement of beans as fair although farmers are not turning loose supplies nearly as fast as anticipated. Soybean meal, according to government statistics, is being shipped in a little larger volume than last year's crop. Soybean meal forty-four percent unrestricted billing, was quoted at $66 per ton January-Februry; $65.50 March-September basis Decatur, and southeastern meal was offered at $68 basis Mississippi Valley points for January, February and March.

Waxes

Beeswax—Consuming demand was reported light and spotty. Offers of crude bleachable wax continued scarce and quotations were nominal around 70c. per pound, for shipment due to lack of trading. African crude remained steady, ranging from 60c. to 62c. per pound, as to quantity. Refined grades were unchanged and firm, with demand spotty.

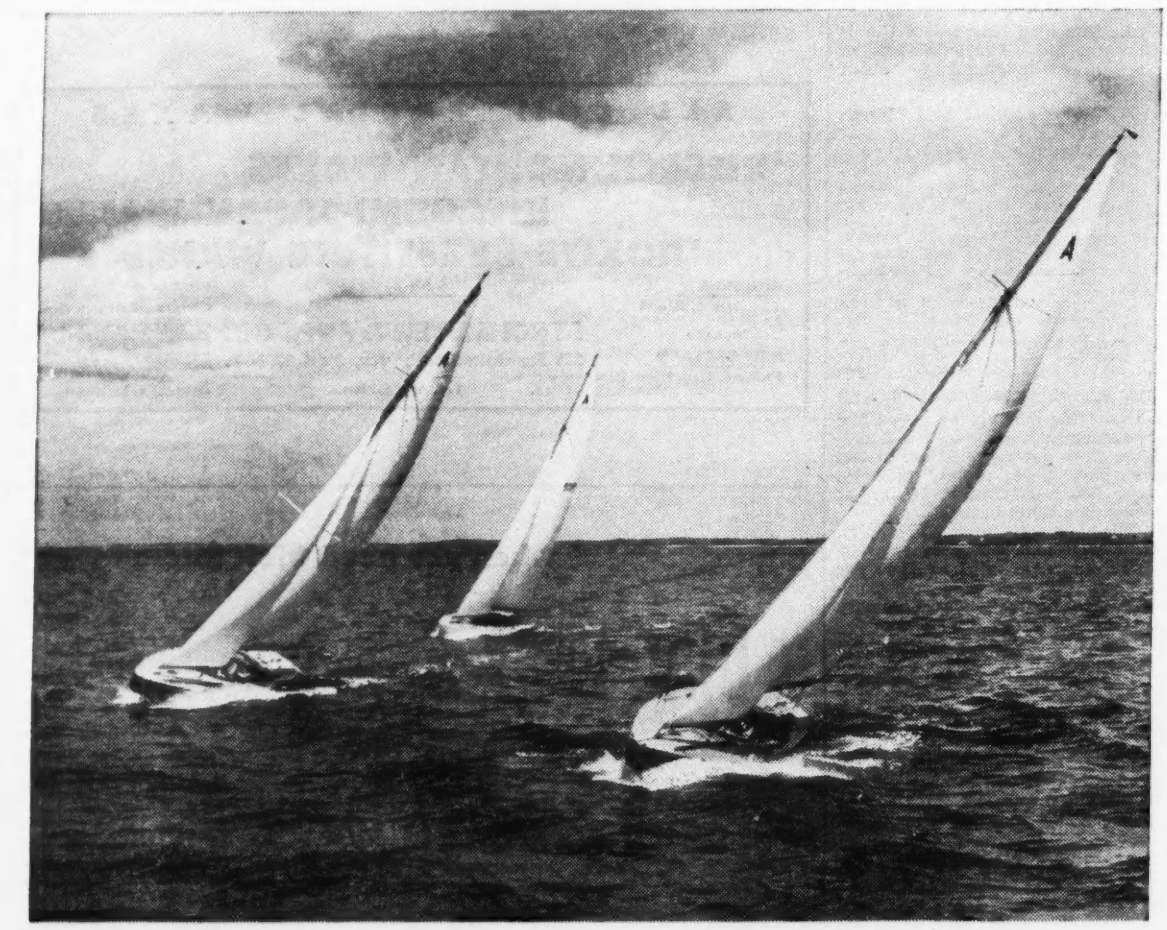
Carnauba—Buying interest was not as keen as early in the month. Sales last week were restricted to actual needs. Prices of No. 3 crude Ceara continued to cover a wide range from 66c. to 69c. per pound depending upon quantity and quality, spot. Parnahyba was well held at 70c. to 72c. per pound, same basis. Good quality yellow, Ceara was maintained at $1.03 to $1.04 per pound, with offers of poor material heard as low as 98c. on spot. There was no change in refined grades.

Japan—Market remained steady, with good quality wax held at 47c. to 48c. per pound, spot as to quantity. Stocks on spot were limited.

Ouricury—Trading was light. Prices were steady, ranging from 93c. to $1.03 per pound, according to quality and quantity.

Pa. Confectioners Slate Conference

The Pennsylvania Manufacturing Confectioners' Association will hold its ninth annual production conference April 28 and 29 at Franklin and Marshall College, Lancaster, Pa.



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Obituaries

Axel W. Larson

Axel W. Larson, for many years an official of Hoffman-LaRoche, Inc., Nutley, N. J., died January 14 in San Francisco. Before joining Hoffman-LaRoche in 1928 as director of the field staff he had been sales manager of Standard Laboratories, Inc., Chicago.

In 1942, as assistant secretary of Hoffman-LaRoche, Mr. Larson was sent to Washington, D. C. After World War II he directed the firm's New York city affairs and then was given a special assignment in Los Angeles. He retired in 1948.

Samuel Mairs

Samuel Mairs, chairman of the board of directors of Archer-Daniels-Midland Company, Minneapolis, Minn., died January 17 at Ocho Rios, Jamaica. He was seventy-five years old.

Mr. Mairs joined Archer-Daniels-Midland in 1903 when it was only one year old. In 1908, he was made a director and secretary of the firm. He was elected a vice-president in 1924, executive vice-president in 1933, and chairman of the board of directors in 1947.

Edward L. Wagon

Edward L. Wagon, assistant vice-president of Sinclair Oil Corporation, died January 13 in Tuckahoe, N. Y. Mr. Wagon was born in England and came to the United States as an accountant in 1914. He had been with Sinclair Oil since its organization in 1916.

Eugene Law Crosthwait, business manager of the Johns-Manville Research Center, Manville, N. J., died January 18. He was 50 years old. Mr. Crosthwait had been with Johns-Manville since 1927.

Joseph Glass, president since 1930 of the Middle States Petroleum Corporation, New York, died January 18. Mr. Glass was also president and director of the Mid-States Oil Corporation and president and director of Midben Pipe Line Corporation. He was sixty years old.

William M. Jardine, Secretary of Agriculture in Calvin Coolidge's cabinet, and former president of Kansas State College and the University of Wichita, died January 17 in San Antonio, Tex. He was seventy-six years old.

Charles Stanley MacCrea, office manager of the West Africa division of Socony Vacuum Company, New York, died January 13 in Chatham, Conn. He was sixty-six years old.

John A. Pfanner, retired executive of Thresher Varnish Company, died at Vero Beach, Fla., January 13. He was eighty-eight years old. Mr. Pfanner was with Thresher forty-seven years and was president in 1937 when it was sold to Pittsburgh Plate Glass Company.

Raymond Rarsel Reese, assistant to the president of American Smelting & Refining Company, died January 17 at Larchmont, N. Y. He was fifty-eight years old.

William H. J. Smith, founder of Quality Chemical Company, died January 11 in Buffalo, N. Y. He was eighty-four years old.

Metasap Adds Laboratory

A new laboratory has been opened by Metasap Chemical Company, a subsidiary of Nopco Chemical Company, at its Harrison, N. J., plant. The laboratory will serve as Metasap's sales service and research center. Activities in the laboratory will be under the direction of F. J. Licata, technical director of Metasap.

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1—±28 Devine Vacuum Shelf Dryer, 20—59" x78" Shelves, complete.
3—3'x50' Rotary D. H. Dryers or Coolers.
14—Sperry 18"x18" iron recessed Filter Presses, 18 chambers.
1—50 gal. stainless 347 Calandria Still, agitated, sight glasses, with condenser.
1—50 gal. stainless 347 agitated Tank, M.D.
3—Sperry iron 36x36 recessed Filter Presses, 100 chambers, 2" cake, hydr. closure.
2—Link-Belt Co. ROTARY DRYERS, Roto-Louvre ±502-16, Type C, 5'2" dia. 16' long, with ±304 S/S contact parts. ±207-10, 2'7" dia. x 10' long, carbon steel construction, and all auxiliaries.
1—Day Imperial jacketed Mixer, 75 gal.
3—Anco 4'x9' Chilling Rolls.
3—Colton 5½ single punch Tablet Machines, M.D.
3—±12 Sweetland FILTERS, 48 bronze monel covered leaves, 3" c/c.
1—Fitzpatrick Model D Stainless Comminuter, m.d.
1—Reed-Std Horiz dbl ribbon Mixer, center disch, 2,000±, 480 gal.
1—American 24x36 Atmos. dbl Drum Dryer, complete.
2—CME Cont. S/S Centrifugals, solid bowl, 21" & 30"x40".

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1—Hersey Monel 3' x 24' Rotary Dryer.
1—Koppers 30" Crushing Roll.
1—Buflovak 2 Door Vacuum Dryer, Size J.
2—7500# Powder Mixers—Galvanized.
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3—Bird 40" Steel Bottom Discharge Centrifuges.
4—Louisville Dryers, 4', 5', 6' x 30', 35', 50'.
14—Shriver and Sperry 36", 30", and 24" 18" Iron, Lead, Aluminum Filter Presses.
1—Oliver Pressure Precoat 5'x3' Steel.
1—Baker Perkins 500 gallon Double Arm Jacketed Mixer.
1—Buflovak Monel Double Effect Evaporator.
7—Raymond 00, 000, #1, #2 Mills, 1 SS.
1—New 25 H.P. Agitator, 1150 rpm.
6—Tyler Niagara 2' x 8', 3' x 8' Sifters.
3—36" Copper Coating Pans—MD—Stokes.
2—New Karbate Condensers, 20 & 70 square feet.
2—New Stokes #F138 Vacuum Shelf Dryers.
11—400 square feet Aluminum Heat Exchangers, 1" tubes.
14—600 square feet Aluminum Heat Exchangers, ¾" tubes.
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8—80 gallon Autoclaves Type 347 500# Internal Pressure Agitated.
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2—Lectro Dryers, 250-350 CFM.
1—American Tool 40" Bottom Discharge Centrifuge.

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DRYER, BUFFALO, DOUBLE DRUM, 36" DIA. x 92". RECONDITIONED. COMPLETE.

FILTER PRESSES—18"x18" rubber covered, 16 P & F; 42" x 42", 38 P & F.
KILNS, 2—5' dia. x 40' long. COMPLETE.
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MIXERS—D. A. SIGMA, Jktd. STEEL AND S.S. 2½, 50, 60, 200, & 3500 GALLON.
MIXERS, DRY POWDER—600, 1000 lb.
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1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
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1—Copper Evaporator, steam jacketed, 9'1"x3'9".
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1—Abbe Ball Mill, 140 gal., Buhrstone lined.
±316 Stainless Steel Tanks, new 100, 200 & 300 gal.
2—Nash Air Compressors, Type AL-623.
1—Manton Gaulin Stainless Homogenizer. 125 gph.
2—I&R Vacuum Pumps, 5 H.P., 60' & 100'.
15—Heat Exchangers (some stainless steel).
1—Kennedy-Van Saun Rotary Dryer, 4'x40'.
Davenport Rotary Steam Tube Dryer, 6'x36'.
1—Gruendler Hammer Mill, 10 H.P.—New.
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1—±316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
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1—Patterson Ball Mill, 42x36, jacketed.
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1—Leader Iron Wks. 1000 gal. 316 SS jacketed, agitated Reactor 6'x56", 75# jacket pressure, 25# int. pressure.

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4—Link Belt Rubber Belt Conveyors fully enclosed 12"x30', 12"x34', 12"x55', 12"x72' long

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1—Link Belt Twin Screw Conveyor, steel 11"x14', 11"x10'.

1—Link Belt Screw Conveyor 6"x12', 304 SS

1—Link Belt 304 SS Bucket Elevator 40'6" c.c.

DRYERS

2—Western Precipitation 304 SS jacketed heated "Holoflite" Screw Conveyor Dryers 50 ft.

1—Rietz Mfg. Co. 304 SS jacketed, heated Screw Conveyor Dryer 50 ft.

2—Buflovak 6' dia. x 5'6" Monel, single drum Flakers or Dryers.

1—Allis Chalmers 5'6" dia. x 25' long Rotary Dryer ½" shell.

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1—Struthers-Wells 461 sq. ft. Karbate, 40# shell, 40# tubes.
1—Struthers-Wells 431 sq. ft. Karbate, 60# shell, 60# tubes.
1—400 sq. ft., steel.
3—Pfaudler 390 sq. ft., 316 SS, 75# shell, 75# tubes.
2—Struthers-Wells 370 sq. ft. Karbate, 52# shell, 60# tubes.
1—Struthers-Wells 370 sq. ft. Karbate, 40# shell, 40# tubes.
1—Struthers-Wells 330 sq. ft. Karbate, 60# shell, 60# tubes.
1—Alberger 255 sq. ft. Karbate, 40# shell, 40# tubes.
1—Alberger 159 sq. ft. Karbate, 40# shell, 40# tubes.
2—Nickel 93.8 sq. ft. double pipe, 300# shell, 100# tubes.
2—Alberger 88 sq. ft. Karbate, 40# shell, 40# tubes.
1—Struthers-Wells 83 sq. ft. Karbate, 60# shell, 60# tubes.
7—Alberger 78 sq. ft. Karbate, 40# shell, 40# tubes.
1—Struthers-Wells 31 sq. ft. steel, 75# shell, 75# tubes.
4—Alberger 16.4 sq. ft. Karbate, 40# shell, 40# tubes.
1—National Carbon 16 sq. ft. Karbate, 40# shell, 40# tubes.

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1—Ingersoll-Rand Jet Refrigeration unit, 208 ton, at 60 deg. F.

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2—Patterson 6' Conical Blenders, 69 cu. ft. operating capacity with 15 HP AC gearhead motors.

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3—American Blowers 7900 and 12,000 cfm motor driven

1—Buffalo-Forge 640 cfm 7" static pressure, motor driven (all motors explosion proof)

PUMPS

13—Karbate Centrifugal, motor driven
2—40 gpm 120' head
2—50 gpm 24' head
9—60 gpm 60' head

8—Duriron Co. Chlorimet—3 Centrifugal, motor driven
2—45 gpm 84' head
2—60 gpm 180' head
4—60 gpm 240' head

7—Duriron Co. Durimet Centrifugal motor driven
1—20 gpm 22' head
3—60 gpm 180' head
3—150 gpm 52' head

13—Duriron Co. 316 SS Centrifugal, motor driven
4—60 gpm 47' head
4—70 gpm 80' head
1—80 gpm 125' head
3—165 gpm 145' head
1—175 gpm 160' head

7—Lawrence 316 SS Centrifugal motor driven
2—10 gpm 27' head
1—60 gpm 208' head
1—70 gpm 157' head
2—100 gpm 25' head
1—350 gpm 123' head

2—Gould 304 SS Centrifugal, motor driven 98 gpm 70' head

2—LaBour steel Centrifugal, motor driven
1—50 gpm 85' head
1—70 gpm 90' head

7—Ingersoll-Rand steel Centrifugal, motor driven
2—650 gpm 116' head
1—1000 gpm 93' head
2—1000 gpm 100' head
2—1000 gpm 110' head

1—Deane steel Centrifugal, motor driven
250 gpm 70' head
(all motors explosion proof)

TANKS

4—Pfaudler 5000 gal. glass lined 9' dia. x 9'6" long, 35# int. pressure.

2—Pfaudler 2300 gal. glass lined 78" dia. x 96", 50# int. pressure.

5—Pfaudler 1200 gal. glass lined 66" dia. x 72" high, 50# int. pressure.

1—Pfaudler 500 gal. glass lined 4' dia. x 5', 40# int. pressure.

1—316 SS, 13,000 gal. Hopper 18' dia. x 4'4" on the straight side with a 9' cone and 5 HP Lightnin agitator.

1—316 SS, 7500 gal. Hopper 12' x 6' with 5'6" cone.

2—316 SS Horizontal 5,000 gal. 6'6" dia. x 20' long, 25# int. pressure.

1—Steel 30' dia. x 33'2" high, 175,000 gal. cap.

3—Steel Horizontal 24,000 gal. 10' dia. x 40' long, 50# int. pressure.

1—Steel Horizontal 8' dia. x 30' long, 10,000 gal.

3—Steel 8' dia. x 27'3" long, 9000 gal. cap., 25# int. pressure.

1—Steel Horizontal 5' dia. x 22' long, 3250 gal., 125# int. pressure.

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1—Baker Perkins 50 gal. double arm, jacketed, Vacum Mixer, 50 HP.
2—Baker Perkins 100, 50 gal. double arm, jacketed Mixers.
7—Sprout Waldron S.S. jacketed, Horizontal Powder Mixers, 67, 27 and 10 cu. ft.
1—Struthers Wells 6'x9' S.S. Rotating jacketed Mixer.
2—Pfaudler 500 gal. glass lined, jacketed, agitated Reactors, Unused.
2—Blaw Knox 800 gal. 347 S.S. agitated Reactors, ASME, U-69, 100 PSI.
1—Struthers Wells 750 gal. S.S. jacketed, agitated Reactor.
1—Buflovak 800 gal., 347 stainless clad, jacketed Reactor.
1—Vertical 304 S.S. Storage Tank, 25,000 gal. NEW.
4—Heat Exchangers, 316 S.S., 200 and 100 sq. ft. NEW.
3—Unused Karbate Heat Exchangers, 188 sq. ft.
1—Sharples P.N. 14 Super-D-Canter 316 S.S.
2—Bird 18"x28" solid bowl Continuous Centrifuges, 310 stainless.
2—Sharples C-20, C-27 Super-D-Hydrators, 316 S.S.
3—Sharples P-16 Monel and S.S. Pressurtite Super Centrifuges.
1—Bird 40" Suspended Centrifugal 347 stainless, perforated basket, XP motor.
1—Bird 40" Suspended Centrifugal, rubber covered, imperforate basket.
1—AT&M 36" center slung, rubber covered Centrifugal, perforated basket.
1—Sparkler #33-D-9 Filter, 316 S.S.
1—Niagara #140-36 Filter 140 sq. ft., 316 S.S.
1—Niagara #110-20 Filter with 12 S.S. leaves.
1—Niagara type Horizontal Filter with 15-48" dia. S.S. leaves, 375 sq. ft.
1—Oliver 8'x6' Rotary Vacuum S.S. Filter, Unused.
1—Feinc 5'x4' S.S. Rotary String Filter.
1—Eimco 8'x8' Rotary Vacuum Filter.
2—#3 Sweetland S.S. Filters with 12-25" dia. leaves, 75 sq. ft.
4—Shriver 36"x36", 30"x30" c.i. Filter Presses P&F, washing.
1—Hersey 4'x30' S.S. Hot Air Rotary Dryer.
3—Struthers Wells 5'x15' nickel Rotary Vac Dryers.
1—Devine 2'x4' Vacuum Drum Dryer, 316 S.S.
1—Stokes #138H Vacuum Shelf Dryer having 10-44"x40" shelves.
1—Devine double door Vacuum Shelf Dryer having 17-59"x78" shelves.
2—Stokes Rotary Vacuum Dryers 3'x15' and 30"x8'.
3—Link Belt Roto-Louvre Dryers 7'5"x20' S.S., 6'4"x24', 3'10"x16', 2'7"x10' steel.
1—13,000 gal. Horizontal Propane Pressure Tank, ASME, 225# W.P.
1—Eureka #3 Porcelain Jar Mill 14.7 gals.
4—Mikro Pulverizers #2TH, #1SH, #1SI and Bantam.
2—Hardinge 6'x22", 4½'x16" Conical steel lined Mills.
1—Patterson 6'x8' porcelain (Berylite) lined Mill, 50 HP. NEW.
1—Patterson 4'x4' porcelain lined, jacketed Pebble Mill.
3—Orville Simpson Rotex Sifters 40"x84", 20"x81", 20"x48" double and triple deck.
3—Nash Vacuum Pumps, #H8, #H7, #H6.
1—National 10"x20" two roll Mill with 25 HP motor.
4—Stokes DDS2, DD2, D4 and D3 Rotary Tablet Machines.

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LIQUIDATIONS

ANOTHER PERRY LIQUIDATION

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1—Penna. Ring type Granulator, Trojan K3-24, 18" x 36" hopper opening, 40 HP motor.

3—Rotoclone size 20, type W. Exhausters and Dust Collectors, 40 HP motor.

2—Fuller-Kinyon Pumps, 6" type E, with 25 HP motors.

1—Steel Bucket Elevator, 81' H, 16" x 16" x 8" buckets.

2—Screw Conveyors 12" dia. x 60'

1—Drag Conveyor, 8" x 16" x 65'

Lithopone Mfg. Plant

1—Traylor Rotary Kiln, 10'6" D x 105' L x ¾" welded shell.

8—Muffle Furnace Chrome Nickel Alloy Tubes, 24" dia. x 8'6" L.

1—Pivoted Bucket Carrier, 185 lin. ft., 16" x 18" piv. bkts.

1—Allis Ch. Contin. Steel Ball Mill, 6' D x 16' L.

3—Pebble Mills, Contin., 4'6" D x 12' L.

2—Charlotte #50 Colloid Mills.

1—Humbolt Colloid Mill, Jacketed, 50 HP.

1—Bird 36 x 50 Solid Bowl Centrifuge.

1—2000 gal. Stainless Clad Tank.

1—Sperry 30" C.I. P&F Filter, 46 ch., hydr. closer, vis. cl. disch.

2—Richardson Convey-O-Weigh Scales.

3—Trough Belt Conveyors, 22' to 35' L.

5—Pan Conveyors, 12' to 95' L.

1—Bucket Elevator, 95' H—10x6.

Miscel. Equip.—Bins, pumps, blowers, motors, scales, etc.

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2—Rotex Screens, single deck, 40 x 96; 48 x 96.

2—4'6" x 40' Louisville Rot. Steam Tube Dryers.

2—42" x 120" Double Drum Dryers.

300' Screw Conveyor, 9" & 12" dia.

8—Centrifugal Pumps with 10 HP to 30 HP motors—250 GPM to 800 GPM.

1—Nash Hytor Compressor with 20 HP motor.

6—Vertical and Side Entering Agitators, 3 HP to 15 HP.

1—8800 gal. Horiz. Steel Pressure or Vacum Cooker, ASME 85#, with agitator, drive, pump.

12—Copper Tanks. 5500 gal., 2800 gal., 2300 gal., 1723 & 1463 gal. cap.

1—Fitz. Model F Comminuting Mach., St. St. 25 HP.

1—Gruendler 36x24 Hammermill.

1—J. B. Hammer Mill, 75 HP.

1—Coppus Steam Turbine, 75 HP.

1—Ing. Rand type 20 Air Compressor, 30 H.P.

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PROCESS EQUIPMENT

CENTRIFUGES—40" SS, Susp., Perf. 40" Steel, Susp., Perf., 7½ HP.
Super-D-Canter PN-14, 316 SS (NEW).
Super-D-Hydrator C-27, 316SS(NEW).
COLUMNS—72"x17'10" Everdur.
72"x29'8", SS 347, 21 trays, 800 caps.
60"x24'7" Everdur, 24 trays, 800 caps.
19"x28' Karbate #22, packed (NEW).
DRYERS—30"x8' Stokes, Rotary Vac.
5'x15' Struthers Wells, 20% nickel clad, Rotary Vacuum, w/500 sq. ft. condenser.
EVAPORATORS—488 sq. ft., Double Effect, SS.
Swenson, Triple Effect, steel, long tube. 860 sq. ft., 8 pass, Ammonia.
FILTERS—Sweetland #5, SS, (30) 24" leaves, 2" cc. hyd. close.
604-24 steel; 705-20 SS.
8'x10' Oliver, Rotary, Vac., steel.
KILNS—Roto-Louvre 207-10, 310-16, 604-24 steel; 705-20 SS.
16"x12'6" & 3'x24' Monel; 3'x26', 4'x27', 4'x30', 4'x42', 4'6"x50', 5'x44', 5'x50', 5'x67', 8'x125', 9'x80', 10x50', 10'6"x112'.
MIXERS—Struthers Wells 6'x9' SS clad, jktd. rotary.
Patterson, 4' conical, 29 cu. ft., 5 HP.
Baker Perkins 18-DIM, SS, 300 gal., 30 HP.
Sprout Waldron 67, 27, & 10 cu. ft., SS clad, jktd.
REACTORS—1000 gal., SS 304, jktd., ASME.
750 gal., SS, jktd. & agit. (UNUSED).
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Stokes 2'x6' Rotary Vac. Dryer.
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Proctor & Schwartz Soap Chip Dryer.
2—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20".

CENTRIFUGALS AND CENTRIFUGES
4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

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1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Sweetland & Oliver Filters.

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1—250 gal. Lead lined Kettle.
5—American Tool 300 gal. Churns.
1—250 gal. Jacketed Copper Kettle.
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Copper & Stainless Varnish Kettles.

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Abbe 30"x30" & 30"x36". Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
Buchanan 5"x12" Jaw Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Ilouchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

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Baker Perkins double arm Mixers, 100, 50 & 9 gal. Also single arm Mixers.
Read 50 & 100 gal. double arm mixers.
Read 40 & 80 qt. vert. 4 speed Mixer.
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15—Portable Elec. Mixers, ¼ to 3 HP.
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4041/P1—A. T. & M. 12" Stainless Suspended Type Centrifuge
3615 G1—Tolhurst 48" Overdriven; perforated Basket; Rubber cov. 10 HP
1152 M6—Bird 40" Rubber Cov. Extractor; with 40 HP 2 speed motor
1152 M6—Bird 12" Rubber Lined Centrifuge with extra imperforate Basket
C5-136—Fletcher 40" Steel Solid Bowl Centrifugal; 20 HP motor
C4-509—Tolhurst 20" Stainless Extractor; Perforated Basket; under driven
C5-191—Tolhurst 26" Suspended with Plow and Scraper; two speed motor
2945 M4—Tolhurst 40" Overdriven; self balancing with Copper Basket, perforated; 7½ HP motor
C4-121—A. T. & M. type 316 S/S Vacuum & Pressure Hoods, 6'9"; link suspended; 15 HP 2 speed motor
C5-200—A. T. & M. 40" Stainless Suspended Type Centrifugals; bottom dum; with 40 H.P. motor
C6-201—Three Podbielnik Centrifugal Counter Current Solvent Extractors; 100 PSI seal pressure; 32"x37" x54" overall
C5-205—A. T. & M. 42" Suspended Centrifuge; Perforated Basket; 40 HP
C5-206—A. T. & M. Type 316 S.S. 42" Susp. Centrifuge; 30/15 HP XPL motor
4042/K1—A. T. & M. Stainless Suspended Centrifuge; 30" x 15"; 20 HP
4093 B11—12A. T. & M. Suspended Type Centrifuges 40"x24" and 48"x28" bottom solids discharge; with 15 HP motors

CENTRIFUGALS (CONTINUOUS)

3870M-1—Bird Continuous, Conical Centrifugal 18"x28"
C7-127—Bird Rubber and Hastelloy Solid Bowl; 40"x60"
C7-128—CME Stainless Solid Bowl Conical; 21"x36"
C7-129—Bird Rubber and S/S 36"x50" continuous
C7-130—Bird Solid Bowl Steel; 30"x72"
C7-131—Baker Perkins Termeer HS 1600 with 40 HP
C6-125—Sharples Nozzlejector Type DM204; 7½ HP 4800 RPM
C6-123—DeLaval Stainless Multimatic Separator 48" dia.
C7-133—Sharples S/S Super D-Canter Continuous Centrifuge
C7-132—Laughlin Continuous Centrifuge; 30"x17"
C7-142—Sharples Super-D Hydrator S.S. 27"; Aut. Unloader.
C7-140—Baker Perkins Ter-Meer S. 24 Centrifugal with 7½ HP
C7-150—Merke Stainless Cont. Centrifugal Type B; 15 HP
385352—Baker Perkins S 12 Cont. Centrifugal Type 316 SS; 7½ HP
C7-146—Sharples Super-D-Canter Centrifuge PY14; Stainless; Vaporite
C7-160—Sharples Super-D-Canter Centrifuge; PN 14 in Stainless
C7-500—Sharples Superdehydrator Type BD-C27 in Stainless; 25 HP

CLARIFIERS — SEPARATORS

3240 M3—Sharples Supercentrifuge M34-21-IJY S/S; 3 HP
3269—Sharples DeWaxing Centrifuge; Type DM202-23C
C6-124—Sharples No. 16 S/S Supercentrifuge Clarifier 2 HP
C6-126—DeLaval Yeast Separator Type OVK5 with 7½ HP motor
C9-500—Patterson Westphalia Clarifier Type RDE; Stainless; 7½ HP
3564—Sharples Steel Clarifier Model M4 PIE with 2 HP motor
C6-142—Sharples No. 16 Aluminum Vaporseal Supercentrifuge
C6-143—DeLaval S/S Model 165 Clarifier Type Centrifuge
655 R 19—Sharples No. 16 Vaporite Type M33 Centrifugal
4093-B1—6 Sharples Super Centrifugals Type M4W-3E7 with 2 HP motors
4093-B7—9 DeLaval Centrifugals Type 94-11 with 2 HP motors

REACTORS

3424 K4—Stainless Reactor; with coils agitated; 24"x48"
3824S-12—Pfaudler Glass Lined Jacketed Agitated Reactor; 12"x12"
3824S-14—Pfaudler Glass Lined Jacketed Agitated Reactor; 36"x36"
3705 L7—Stainless Steel Autoclave; 5"x12"
3673 L9—Pfaudler Glass Lined Jktd. Reactor; 16"x28"
R4-302—Pfaudler Glass Lined 50 Gal. Jktd.; Agtd. Kettle; 24"x30"
R4-303—Pfaudler Glass Lined 50 Gal. Jktd.; Agtd. Reactor
3670—Steel Reactor 4'x4' heated with copper coil unit
3944 B2—Steel Jacketed and Agitated Reactor; 315 Gal.; 44"x48"
3424 K9—Stainless 475 Gal. Reactor 4'x5' Jacketed and Agitated
3168—Stainless 500 Gal. Jacketed Reactor; 6' dia. x 30" straight side
3168 D7—Doppley Jacketed Reactor; 40"x8' high
3390—Buffalo 500 Gal. New Jktd. Agtd. Reactor; 4'x5'2" motorized
3273—Pfaudler Glass Lined Jacketed, Agitated Reactor; 47"x67"
3434—Dopp 650 Gal. Cast Iron Full Jktd. Agitated Reactor; 80"x67"
3934 C41—Steel Reactor; 850 Gal. 5'x5'6"; agitated; coil heated
R4 303—Lead Lined Reactor; 1000 Gal. 4'x6'; Jktd. ASME 50 PSI
3113 E2—Copper Vacuum Pan; coil heated; 2000 Gal. 7' diameter
R4-227—Cast Iron 1000 Gal. Nitre Pot; 6'x6'; agitated 5 HP motor
3598—Steel 2600 Gal. Jktd. Agt. Reactor; 8'x7'
3799Y-1—Lancaster Stainless Lined Rotary Reactor; Jktd.; 50"x174"
3870M-2—Majonnier Stainless Vacuum Pan 3'x10'
R4-311—Aluminum Pressure Vessel 800 Gal. 51"x98" Jacketed

AUTOCLAVES (includes Vulcanizers Sterilizers, Retorts, etc.)

R4-304—Cast Steel Autoclave 250 gal; 350 PSI; 4'x5'; Jktd. Agitated
3259G5—Steel Hor. Autoclaves with tracks; 66" dia. x 14'7" long
V4-304—Adamson Autoclave; 6'x19"; with inner tracks 84"x66"
V4-310—Adamson horizontal welded steel Vulcanizer
V4-311—Jackson & Church Steel Vulcanizer 6'6"x65' with tracks and quick opening door
V4-262—Biggs Vulcanizer; ASME code; 6'x14'; quick open door
R4-226—Hi Pressure Steel Autoclave; 300 PSI; 6'x21'; Jktd. Agtd.
V4260—Steel Autoclave; 5'x26'; tracks, pump, receiver
R4-301—Globe Rotary Kier; 14' Diameter with 15 HP motor
R4-251—Struthers Wells Jacketed Steel Rotary Autoclave or Digester 100 PSI-TSME; 9'6"x12'; with 7½ HP motor
R4-506—McNeil Digester; Vertical 8'7"x11'5"; Jktd. 185 PSI; Agit. 40 HP
R4-500—Steel Pressure Tank; 7000 gal.; 8' x 19'8"; welded 150 PSI ASME
V4-500—Laboratory Vulcanizer horizontal; 36" x 51"; 150 PSI; simplex door
V4-400—Smith Hor. Steel Vulcanizer 5' x 16'; 100 PSI with tracks
V4-401—Horizontal Vulcanizer 6' x 10'; 125 PSI-ASME; Simplex Door
V4-402—Horizontal Vulcanizer; 6' x 42' with quick opening door
V4-403—Horizontal Vulcanizer; 5' x 21' good for 125 PSI
3899/L2—American Sterilizer; 42" x 60"; quick opening door
3917/P2—American Sterilizer No. 00; 30" x 42" x 84"

HAMMERMILLS, CRUSHERS, GRINDERS, PULVERIZERS

3655 W2—Grunedler Supermaster No. 1 Hammer Mill; 15 HP
M10 D200—Mikro No. 2 SP Pulverizer; 10 HP with 2 HP Pre Crusher
3331—Mikro No. 2 TH screw feed with Pre-Breaker
3324 E2—Mikro No. 4 F Pulverizer; 15"x24"
McA1501—Mikro No. 2 Type SCB shamber 7"x11½"; arr. for motor drive
3868N-1—Fitzpatrick Model D Stainless Comminutator; cooling jacket
M10-202—Fitzpatrick Model K Comminutator with 20 HP motor
M10 A300—Jeffrey Pulverizer Type A 30" x 24" with 40 HP motor
3705 L3—Fitzpatrick Homoloid Pulverizer; motorized
3293 N1—Raymond Imp Mill 9"x13" with accessories
2383—Raymond Model No. 00 Aut. Pulverizer with accessories
1091 N1—Williams Model NF Hammer Mill; 25"x14"; requires 60 HP
3429 A7—Williams Hammer Mill 36"x18"; requires 60 HP
3429 A-5-6—Williams Hammer Mill No. 4 18"x48" requires 60 HP
3769—Jay Bee Model 2U Hammer Mill; 19¾"x14" requires 20 HP
3429 A8—Gruendler Pulverizer 12"x48" requires 150 HP motor
3192 A1—Gruendler Pulverizer No. 3 chamber 8"x16"
3429 A9—Gump Bar Nun No. 40 Hammer Mill; 12"x40"; requires 60 HP
3545—Jay Bee Model A4 chamber 12"x18" with 25 HP motor
M10-183—Jeffrey Swing Hammer Mill Type E 42"x36" for 100 HP motor
M10-191—Stedman Type BX 20"x12" Swing Hammer Mill; 40 HP motor
M10-190—Riley Duplex Attritor requires 250 HP motor
3277—Robinson 26" Double Runner Attritien Mill; two 10 HP motors
3529W—Bauer 24" Double Runner Attritien Mill with two 20 HP motors
3120—American Ring Roll Crusher; 30"x33" throat; 50 HP
3315 E2—Williams Ring Roll Mill; ring 3"x10"; with 3 rollers 4" dia. arranged for motor drive
3853-S—Raymond No. 50 Stainless Imp Mill with 50 HP motor
MWK-1—Sprout Waldron Roller Mill 2 pair high; 9"x 18"; 10 HP
JR-1—Allis Chalmers Flaking Mill 20"x24" with 25 HP motor
3625 D2—Munson Rotary Cutter Size "0" 3½"x11" feed opening
RH-1—Ball and Jewell Rotary Cutter No. 1 with 15 H.P. motor

SIFTERS — SCREENS

S5 260—Selectro Stainless Steel Screen; double deck; 24" x 84"; 5 HP
S5 261—Selectro Stainless Steel Screen; double deck; 28" x 72"; 3 HP
3835—Selectro Stainless Vibrating Screen Sifter, 18"x60"
3989 K2—Orville Simpson Rotex Sifter No. 21; 30" x 60"; 1 HP
S5-252—Patterson GyroCentrie No. 300; 20"x48" S/S; 3 HP motor
3515—Southway S/S Shaker Screen; 40"x99" with 1 HP motor
10008-7—Sprout Waldron Gyratery Screen 40"x72" with 7½ HP motor
3484 A33—Sutton Steele Separator Model B 100 with 5 HP motor
3903—Robinson Unique Gyro Sifter; 20" x 84" Double Deck
S5-240—Selectro 18"x60" Steel 2 deck Screen V drive
3853S—1—Robinson Vibrating Screen 40"x60"; S.S. contacts
S3-244—Tyler Hummer Screen; 3'x5' with converter, exciter and motor
4036 A1—Rotex Model #421 Sifter 60" x 84" with 2 HP motor
4036 A2—Rotex Model #82; 40" x 120" Double Deck with 3 HP motor
4022 P2—Robinson Unique Gyre Sifter; stainless lined; 20" x 69½"; ½ HP motor

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4—Alco 500 sq. ft. Stainless Steel Heat Exchangers.

1—Struthers Wells 480 sq. ft. Hastalloy "B" Heat Exchanger—NEW.

1—Lummus 360 sq. ft. Stainless Steel Type 316 Heat Exchanger.

1—Pfaudler 7 sq. ft. glass-lined Pipe Condenser.

1—Struthers-Wells 1800 gallon steel jacketed vacuum Reactor with impeller type agitator.

1—Paterson-Kelly 1500 gal. steel jacketed Kettle 75 psi, ASME.

1—Struthers-Wells cast iron jacketed 800 gal. vacuum Kettle with double motion agitator, working pressure shell 100 psi, jacket 200 psi ASME.

1—Nickel 300 gal. Still.

1—Alloy Fabricator Jacketed Reactor 100 gal. with impeller type agitator, Int. pressure 200 psi, jacket pressure 150 psi.

6—Pfaudler 50 gal. glass-lined Vacuum Receivers (New).

5—Stainless Steel 650 gal. Jacketed Closed Kettles with agitators.

1—Pfaudler 150 gal. Stainless Steel Jacketed Tilting type Kettle with agitator.

1—Pennsylvania type 304 Stainless Steel Tank, 3000 gals.

1—Type 347 Stainless Steel Storage Tank, 1500 gallon.

1—Bird 18" x 28" continuous Stainless Steel Filter.

1—Sharples type 316 Stainless Steel Super Dehydrator Model C-20.

Pfaudler glass-lined Series P Jacketed Kettle with agitator and drive, 50 gallon.

1—De Laval type 316 Stainless Steel Multimatic Centrifuge.

1—Fletcher Stainless Steel Suspended Centrifuge with 40" perforated basket.

1—J. H. Day 50 gal. Stainless Steel Jacketed Mixer Sigma Blades.

1—J. H. Day 75 gal. Jacketed Double Arm Sigma Blade Mixer.

6—Simpson Intensive Mixers, #0 and #1.

1—Read Stainless Steel Jacketed Vacuum Mixer, Double Arm Sigma Blades, 10 gal. capacity.

1—Lancaster Stainless Steel Lab. Mixer.

1—Struthers-Wells North Master Mixer, 50 gal. capacity, Double Arm Sigma Blades.

1—Buflovak 32" x 90" Double Drum Dryer Complete.

1—Stainless Steel Rotary Vacuum Dryer, 3' x 12'.

1—Stokes Heresite lined Rotary Vacuum Dryer, 3' x 12'.

2—Buflovak Single Door Vacuum Shelf Dryers—20 shelves.

2—Devine Single Door Vacuum Shelf Dryers—5 and 10 Shelves.

1—Devine Lab. Vacuum Shelf Dryer—3 Shelves (New.

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27—Agitators & Drives ¼ H.P. to 25 H.P. Some Explosion Proof.
1—Blaw Knox 110 gal. Jack. Ag. Autoclave 2000 psi.
1—Horiz. Jack. Autoclave 30" x 48" x 84" deep.
1—Keeler 350 H.P. Type CP Boiler 160# W.P.
1—Hercules 60" Rubber Covered Centrifuge.
1—Davis Inconel Heat Exch. 195 sq. ft.
8—Surface Condensers & Receivers, 100 to 175 sq. ft.
3—Carrier Atmos. Truck Dryers, Aerofin Coils, 8-16 & 24 Truck.
1—Buflovak 20 shelf Vac. Dryer, 42" x 42" shelves.
8—Devine Double Dr. Vac. Shelf Dryers, 17 & 20 Shelf 59" x 78".
1—Albright-Nell 4' x 9' Double Drum Dryer.
8—C.I. Filter Presses, 12" to 30".
1—Sweetland #12 Filter, 72 leaves.
3—Sparkler Stainless Filters 8-6.
2—Pfaudler Reactors, 100 & 1000 gallon, G.L.
4—Eppenbach & Premier Colloid Mills, S.S. 1-50 gph.
7—Mixers, D.A. 5 to 200 gal. wkg. cap.
1—Stokes RB-2 Tablet Machine.
1—Mikro 2TH Pulv. w/15 H.P. motor.
3—Rotex Screens 20" x 48" to 40" x 120".
1—Stainless Steel Tank 2100 gal., w/coil.

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Harry Pearlman, Pres. Bill Wolf, Vice-Pres.

"Geared to Serve You"

Shriver 18" Rubber covered Filter Press.
Mikro 1SH Pulverizer—5 H.P.
Abbe Lenart 150 and 400 gal. Mixers.
Abbe 50 gal. Buhrstone Lined Pebble Mill.
Lead Lined Rotary Blender, 6' dia. x 15'.
400 gal. Pressure Jacketed Kettle.
Star 12" Disc Stainless Steel Filter.
Pfaudler 250 gal. Closed Top Tanks.
Lancaster Muller Type Mixer—M.D.
Colton #17 Tube Filler & Closer.

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JASPER MACHINERY CO., INC.
282 SIXTH STREET BROOKLYN 15, N. Y.
STerling 8-8308

SPARKLER FILTER—36"x36" S/S fittings and pump.

STAINLESS STEEL AUTOCLAVES — 1,000 p.s.i.—1 gal.—Agitated.

FEEDER—Syntron F-44-W 10"x104" S/S trough w/selenium rectifier.

MIXER—Lancaster EAG 4½ w/15 HP varidrive—Simpson 1½ w/10 HP drive.

CENTRIFUGES — 26" — 40" — 48" (Rubber) Laughlin Continuous—134 (32"x40").

PEBBLE MILLS—24x36—60x48 Porcelain lined—Motorized.

SCREENS—Tyler Hummer 3'x5' & 4'x5' single/triple deck—Roball 40"x10'.

HAMMER MILLS—Wms. 8x15—24x30 GA 30.

HARDINGE LAB BALL MILLS—Automatic feed/cyclone/collector—1 for wet.

FORK LIFT TRUCKS—7500# cap. Hyster—New engines. Pneumatic tires.

JAW CRUSHERS—10x20 AC, 11x26 Good Roads.

AIR COMPRESSOR—¾ HP—4 cfm 5 HP—I.R. 20 cfm—w/receivers 40 HP Gardner Denver—194 cfm.

HARDINGE MILLS—6x22 & 7x22 Ball—7x48 pebble w/motor drives.

CONDENSORS — 300/500/600 sq. ft. Adm. bronze tubes.

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LAWLER PLACE, METUCHEN, N. J.
METUCHEN 6-0245

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Equipment in excellent condition and still set up as operated for a very limited period.

Plant built for production of Ethyl Alcohol by special fermentation process, but may be readily converted for other products, due to broad variety, modern design and arrangement of equipment.

Plant site improved with railroad sidings, sewers, roads, water and fire lines, waste disposal ponds.

Some of the Major Items of Process Equipment Listed Herewith—Detailed List in Preparation:

PERCOLATION SYSTEM

5—8' dia. x 37'6" (vertical closed top) steel tanks, Everdur lined.
1—3 roll lignin press.
5—Flash tanks with Centrifix Separators.
2—Kelly 650 Twin Filters (1300 sq. ft. each).
4—Heater—Condensers steel shell, copper tubes, 39" dia. x 12 ft. long.
2—Sweetland Filters—670 sq. ft. each. Tanks, Motor Driven Pumps, Conveyors, hogs, instruments, scales.
1—Rotary self-classifying lime slaker, 5'6"x25'.

FERMENTATION SYSTEM

10—26' dia. x 16'4" (vertical closed top) Fermenters (Cone bottoms) agitated.
8—Centrifugal Yeast Separators—Individually Motor Driven. Complete Yeast Culture Equipment.
1—#175 magne pure culture yeast apparatus.
2—Beer Wells 26' dia. x 16'4", 20 p.s.i.
16—Fermentation Agitators, Model SEV 2500, SEV 300.

EVAPORATOR SYSTEM

1—Quadruple Effect Conkey Evaporator, 5870 sq. ft. heating surface. Complete with pumps, instruments, and accessories.

DISTILLATION SYSTEM

2—Beer Heat Exchangers, 271 sq. ft. Copper Tubes.
1—Pressure Beer Still, copper, 6' dia. x 52' high, 30 plates.
1—Vacuum Beer Still, copper, 5'6" dia. x 52' high, 30 plates.
1—Steam Generator, 92" dia. x 20' long.
1—Vacuum Rectifying Column, copper, 5'6" dia. x 48'6" high. 43 Bubble Cap Plates.
1—Purifying Column, copper, 4'6" dia. x 60' high.
(Above distillation units operated under vacuum and complete with heaters, coolers, condensers, rotameters, recording controllers, ejectors, pumps and interconnecting piping, etc.).
1—Tubular Calandria, 2'10" dia. x 7' long.
1—Alcohol Vaporizer, copper, 5' dia. x 6' long.

COMPLETE POWER PLANT

Consisting of Backcock and Wilcox water tube boilers, minimum 40,000# steam, 225# pressure. Air compressors. Deairating Feed Water Heater, Pumps, etc.

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30 Church st., New York 7, N. Y.

EQUIPMENT OFFERED

Buffalo 800 gal. jktd. kettle with agitator, solid nickel; Day #6 DA Mixer Z Blades; 1,200 gal. SS tank; 2,000# DR Powder Mixer, jacketed, 7½ HP motor; 1,500# new jacketed Soap Crutcher Mixer; 12x32 & 16x40 Roller Mills; 40 HP Motor; Bartelt Packaging Machine, etc., I. E. Newman, 5602 Blackstone, Chicago, Ill.

High Speed Roller Mills, medium speed Roller Mills, Pebble Mills, Pony Mixers, Change Can Mixers. We carry a complete line of rebuilt and guaranteed machinery. Write for list. Irving Barcan Co. 249 Orient Avenue, Jersey City 5, N. J.

For Sale: L & N Instruments. Large quantities of surplus L&N Micromax Strip Chart Recording Controllers (electric); in excellent condition. Thermohm calibration; can convert to thermocouple calibration. Instrument Service Engineering Labs, 1205 Lamar St., Dayton 4, Ohio.

Pilot Plant and full scale chemical plant equipment required for large expansion program. Kettles, columns, heat exchangers, tanks, mixers, dryers, centrifuges, pumps, filters, screens, pulverizers, etc. Stainless steel alloy equipment preferred. Complete plants given immediate study. OPD 564.

Chemical Plant equipment for immediate removal: Oliver #10 Sweetland Filter Ser. #9357R, (27) monel covered leaves 4" centers, hydraulic closing. Large lot of steel storage, mixing and crystallizing tanks—many with agitators and coils. Contact Robert Betz at 214 West Side Avenue, Jersey City, N. J. (Henderson 3-2161) or Perry Equipment Corp., 1421 N. 6th St., Phila. 22, Pa. (Stevenson 4-7210).

FACILITIES OFFERED

Paint Factory, completely equipped, available immediately in New York, Metropolitan area. Moderate rental for 14,000 sq. feet and machinery. OPD 574.

MATERIALS OFFERED

Save up to 60%—20 tons Alkyl Phenol 7c pound; 25 tons T.S.P. (Caked) (2¼ pound; 5 tons Moulding Compound #420 Plaskon 6½c pound; 500 pounds Soap Bark, 1 ton Caustic Potash Pellets, 7½c pound; Farber Products, 226 Lafayette St., New York 12, WOrth 6-0470.

Slashed Below schedule—Propylene Glycol USP; original, factory sealed drums. Vanillin, other food flavor chemicals offered. OPD 580.

Bargains subject to prior sale—5,500 lbs. Calcium Acetate; 50,000 lbs. Zinc Chloride; 800 gallons Grey Exterior Paint (Sherwin Williams); 4,000 gallons Loam Water Emulsion Paint; 1,500 gallons Vermillion Baking Enamel; 2,700 lbs. Pyridine 2' (Barrett); 2,000 lbs. Igepal, Xtra High Cone.; 1,200 lbs. Ethly Bromide; 1,400 lbs. Dodecyl Benzyl Chloride; 4,000 lbs. Celanese Solvent 201. Aceto Chemical Co., Flushing 54, N. Y., INdependence 1-4100.

Valonia Tannin Extract, "Sou-Gas" brand, for the leather industry, 64-67% Pyrogallol type tannin content-imported, prompt shipments. Sole agents: Aegean Trading Co, 154 Nassau St. New York 38; N. Y. Tel. Worth 2-2467.

Ammonium Carbonate Powder, prime quality fresh stock, attractively priced. Shamrock Chemicals Corporation. 420 Lexington Ave., New York 17

MATERIALS WANTED

Wanted: Used diamond steel plate, preferably in sections, 4' x 12' x ¾". At least 20 plates required. OPD 581.

Surplus or off-grade lots—Monochlorbenzene, Orthodichlorbenzene, Trichlorbenzene, Nitrobenzene or other intermediates. Aceto Chemical Co., Inc., Flushing, 54, N. Y. INdependence 1-4100.

POSITIONS OFFERED

Chemical Salesman: Chemical manufacturer desires capable salesman. Some experience selling chemical intermediates required. Write P.O. Box 6, Hawthorne, N. J. stating salary desired, experience, etc.

Tablet Maker, experienced water-soluble tablets, wanted for part-time or mail consultation. Please state experience and fee. All replies held in fullest confidence. Our employees know of this advertisement. OPD 578.

POSITIONS WANTED

Chemical Salesman: Thoroughly experienced. Selling diversified lines of industrial chemicals, pigments, extenders, acids, solvents, resins, agricultural chemicals, etc. Now available for position with reputable concern. OPD 579.

Executive available, married, 35 years old, college, 10 years experience pharmaceutical chemicals, Vice-President manufacturing company for several years. Experience in purchasing, sales, personnel. Interested in position with responsibilities. Available immediately. OPD 577.

Manager Chemicals related products import export sales purchases diversified experience 20 years large Japanese corporation. Present employers 14 years some travelling abroad traded during scarcity periods. Also qualify purchasing agent prefer large manufacturer. OPD 567.

REPRESENTATION OFFERED

American, European manufacturer, going to Europe to establish business seeks firms interested in European market to finish production-distribution there, in order to diminish customs and others costs. OPD 582.

Current Prices

—Continued from page 32

Zinc borate, bgs., c.l., dlvd. E	lb.	.192	- —
l.c.l. dlvd E	lb.	.202	—
Chloride, NF, gran., dms	lb.	.42	- —
precipitated powd dms	lb.	.26	- —
soln., 50%, dms., c.l., works,	100 lbs.	5.50	- —
l.c.l., works	100 lbs.	6.10	- —
tanks, works	100 lbs.	4.85	- —
black, ctns., 20,000 lbs., same basis	lb.	.18	- —
smaller lots, same basis,	lb.	.18½	- —
white, ctns., 20,000 lbs., same basis	lb.	.33½	- —
smaller lots, same basis,	lb.	.34½	- —
tech., fused, dms., c.l., works,	100 lbs.	10.10	- —
l.c.l., works, dms	100 lbs.	10.60	- —
gran., fib., dms., c.l., works	100 lbs.	10.85	- —
l.c.l., works	100 lbs.	11.35	- —
Chromate (see Yellow, zinc).			
Cyanide, kgs., 1,000-lb. lots or more, works	lb.	.523	- —
smaller lots, works	lb.	.543	- —
Dust, pigment, bbls., c.l., works	lb.	.14¾	- —
c.l., works	lb.	.15¾	- —
Fluoride bbls., works	lb.	.49	- .50
Hydrosulfite, dms., c.l., frt. alld.,	lb.	.21½	- —
l.c.l., frt. alld	lb.	.22	- .37½
Metal, prime western slabs, E. St. Louis	lb.	.11½	- —
Naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.24½	- —
10% Zn. dms. frt alld	lb.	.30	- —
Oxide, pigment, American process, lead-free, bgs., c.l., dlvd	lb.	.13½	- —
l.c.l., dlvd	lb.	.14½	- —
Zinc oxide, pigment, American process, leaded 35%, bgs., c.l., milled, bgs., c.l., works	lb.	.04½	- —
l.c.l., dlvd	lb.	.15¼	- —
50%, bgs., c.l., dlvd	lb.	.14¾	- —
l.c.l., dlvd	lb.	.15¾	- —
French process, cml., green seal, bgs., c.l., dlvd	lb.	.15¼	- —
l.c.l., dlvd	lb.	16¼	- —
red seal, bgs., c.l., dlvd	lb	.14¾	- —
l.c.l., dlvd	lb.	.15¾	- —
white seal, bgs., c.l., dlvd.	lb.	.15¾	- —
USP, ctns., c.l., dlvd	lb.	.16¾	- —
l.c.l., dlvd	lb.	.17¾	- —
Zinc oxide Pac. coast prices 1c. higher.			
Phenolsulfomate, NF, gran., dms,	lb.	.39	- —
powd., dms	lb.	.42	- .49
Resinate, precip., 7.2-7.6% Zn, dms., frt. alld	lb.	.29	- —
Silicofluoride, bbls., works	lb.	.12	- .13
Stearate, tech., USP, ctns., c.l.,	lb.	.37	- —
l.c.l.,	lb.	.38	- .42
Sulfate cryst., 22% Zn, bgs., c.l., works, frt. alld	100 lbs.	8.05	- —
l.c.l. same basis	100 lbs.	8.60	- —
flake, 25½%, Zn, bgs., c.l., works,	100 lbs.	7.40	- —
36% Zn, bgs., c.l., frt. alld.	100 lbs.	7.90	- 8.05
l.c.l., same basis.	100 lbs.	8.65	- 8.80
powd., monohydrate, bgs., c.l., dlvd. E	100 lbs.	7.90	- —
c.l., dlvd. E	100 lbs.	8.65	- —
Zinc sulfate in bbls. 40c. higher.			
USP gran dms	lb	26	—
Suntide, pure, bgs., c.l., dlvd	lb.	2530	—
Undecylenate, dms.	lb.	2.25	2.50
Yellow (see Yellow, zinc).			
Zinc-ammonium chloride ngs., c.l., works	100 lbs.	9.65	- —
bbls., c.l., works	100 lbs.	10.25	- —
l.c.l., bbls., works	100 lbs.	10.75	- —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l	lb.	.25½	—
l.c.l.	lb.	.26	.41½
normal dms l.c.l. works	lb.	.52	—
Zircon (G), gran., bgs., c.l., works,	lb.	.03½	- —
5 tons to c.l., works	lb.	.03¾	- —
1 ton to 9,999-lb lots, works,	lb.	.04	- —
smaller lots works	lb.	.06½	- —
Zircon (G) milled, bgs., c.l., works	lb.	.04½	- —
	lb.	.04¾	- —
5 tons to c.l., works	lb.	.04¾	- —
1 ton to 9,999-lb lots, works,	lb.	.04¾	- —
500 to 1,999-lb lots, works,	lb.	.07½	- —
Zircon (G) in barrels, 1c. higher.			
Zirconium acetate, 13% soln. ZrO_2, c.l., 30,000 lbs. minimum, works	lb.	23	- —
Hydride, ctns., works	lb.	7.00	- 8.45
Nitrate, dms., ex whse	lb.	4.50	- 7.00
Oxide, 92½%-99%, white, grd., bbls., or bgs., works	lb.	1.50	- —
lump, electric-fused, bgs., c.l., works	lb.	.44	- —
5-ton lots, works	lb.	.44½	- —
1 ton to 9,999-lb. lots, the works	lb.	.45	- —
CP, white, grd., bbls., or bgs., works	lb.	1.50	- —
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb.	.45½	- —
smaller lots, works,	lb.	.48	- —
milled, electric-fused, bgs., c.l., works	lb.	.59	- —
5-ton lots, works	lb.	.59½	- —
1 ton to 9,999-lb. lots, works	lb.	.60	- —
500 to 1,999-lb. lots, works	lb.	.60½	- —
smaller lots, works,	lb.	.63	- —
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½	- —

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Pulverizers: Micro Williams, Jeffrey.
Dryer: Devine 2x4' vacuum drum, st. st.
Centrifugal: Tolhurst 32" rubber covered.
Pebble Mill: Hardinge 5'x36" continuous.
Feeders: Syntron Vibrator model F-22.
Clarifiers: De Laval 84-51 and 600.
Separator: Sharples model 16B, st. steel.

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4000 lbs. VYNS, 1400 lbs. aluminum powder X fine.

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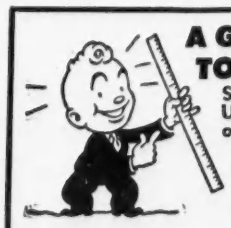

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Note: This Sale Has Special Interest to Experimenters! Many, many more items, including 3,000, 4"-5"-6" Chromalox Heating Rings!

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mobilization base, built at great cost, is maintained in the maximum state of readiness."

Mr. Emmerich explained that the association feels impelled to restate the views it expressed to the Randall commission in 1953 in view of the hearings now in progress on Congressman Jere Cooper's bill giving the President additional powers to reduce tariff rates at his discretion.

"Before authorizing any further reductions in rates," he said, "it would seem preferable to await the recommendations of the United States Tariff Commission based on the study it is now making of existing tariff classifications." He added that there had not yet been sufficient time for the effect of the most recent rate reductions to be observed.

Study By Products Urged

Because of the American chemical industry's essential role in national defense and the interdependence of its thousands of chemicals produced, changes in chemical rates should not be made without careful study of each product and product group.

Mr. Emmerich emphasized that the United States is no longer a high tariff country and that the real hindrances to freer international trade abroad are inconvertibility of currencies, inflationary practices, currency devaluation, arbitrary and discriminatory export and import quotas, subsidies and barter deals.

In conclusion, Mr. Emmerich said that there has been a striking resurgence of the chemical industry abroad since 1950 and that the further reduction of tariffs on chemicals would contribute little toward increasing foreign trade of other countries but would have damaging consequences to the American chemical industry.

Saline Water Conversion

—*Continued from page 3*

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Patents—H. R. 2128 by Rep. O. C. Fisher of Texas authorizing the extension of patents covering inventions whose practice was prevented or curtailed during certain emergency periods by service of the patent owner in the Armed Forces or by production controls.

Pollution—H. R. 2129 by Rep. Peter Frelinghuysen of New Jersey providing for intensified research into the causes, hazards and effects of air pollution, and the methods for its prevention and control.

Depletion—H. R. 2228 by Rep. Earl Wilson of Indiana to prevent discrimination against fiscal year taxpayers with respect to depletion allowances.

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